

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ARCHITECTURE AND PLANNING

DEPARTMENT OF BUILDING TECHNOLOGY



DISSERTATION TOPIC:

SUSTAINABLE PROCUREMENT PRACTICE IN GHANA HEALTH SERVICE

BY

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**A Thesis submitted to the DEPARTMENT OF BUILDING TECHNOLOGY, KWAME
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the requirements for the degree of
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November, 2014.

DECLARATION AND CERTIFICATION

I hereby declare that this submission is my own work towards the award of MSc. Procurement Management and that to the best of my knowledge, it contains no material already published by another person or material which has been accepted for the award of degree from other Universities, except where due acknowledgment has been made in the text.

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Date

DEDICATION

This project work is dedicated to my parents, wife, children and friends who help me in diverse ways in the successful completion of this project work.

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ACKNOWLEDGEMENT

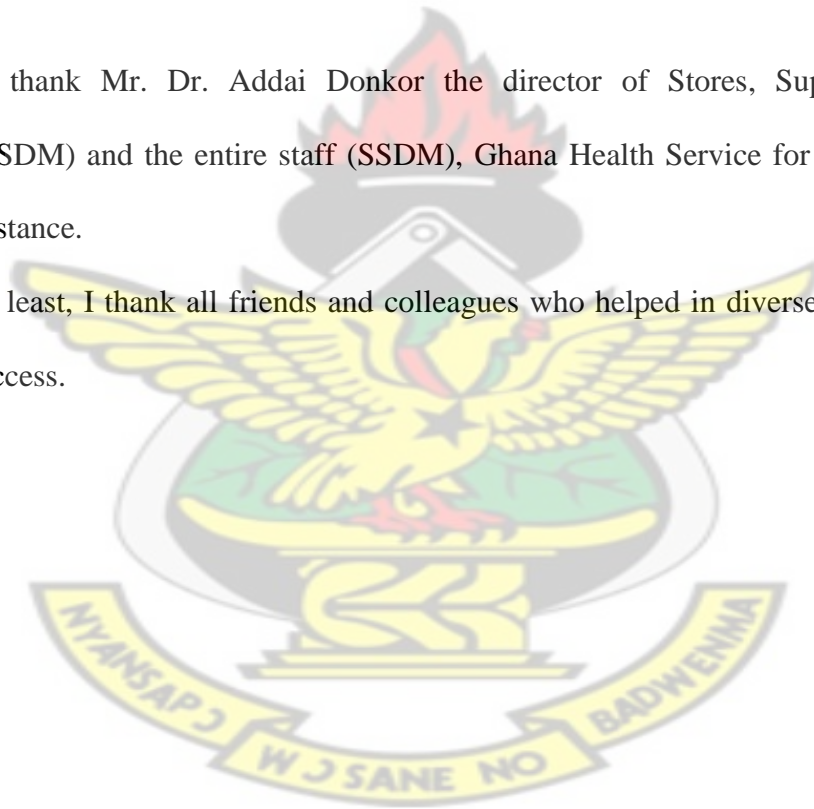
There are many persons to whom I owe thanks for their help, support, advice and suggestions during the various stages of my project work.

The greatest gratitude goes to the Almighty God for giving me strength, wisdom and sense of direction to undertake this project work.

I also, wish to express my warmest appreciation to my supervisor for his supervision, contribution, guidance and inspiration which led to the completion of this work. I say God bless him.

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Last but not the least, I thank all friends and colleagues who helped in diverse ways in making this project a success.



ABSTRACT

The introduction of sustainable public procurement practice in Ghana is beginning to receive much more attention. This has even necessitated the amendment of the country's Procurement Act; Act 663 of 2003 to include sustainable requirements such as environmental, social and economic issues of sustainability in public procurement.

Public procurement accounts for 50-70% of the national budget (after personal emoluments), 14% of GDP and 24% of total imports. (World Bank CPAR 2003).

Public procurement is increasingly seen as a powerful policy tool to bring about major environmental and social benefits.

The research sought to assess the practice of sustainable procurement in Ghana Health Service (Headquarters). The study was a survey. The researcher sample size was made up of thirteen procurement officers, stores and administrative staff at Ghana Health Service, Headquarters, and Accra, through the means of questionnaires and interviews that was carried out.

The study found out that sustainable procurement practices were not being practiced at Ghana Health Service Headquarters, Accra. Purchase orders, evaluation of tenders and award of contracts were based on the lowest bid and the considerations such as the social and environmental issues were not included in their purchasing decisions.

The study found that lack of legislative instrument and policy document was a limiting factor in the adoption of sustainable procurement.

The study recommends that employees should be trained and educated on sustainability practices.

Emphasis should be made on the benefits of sustainability procurement practice and the risks of non-sustainability. Furthermore, incentives should be given to suppliers to encourage them to develop sustainable products.

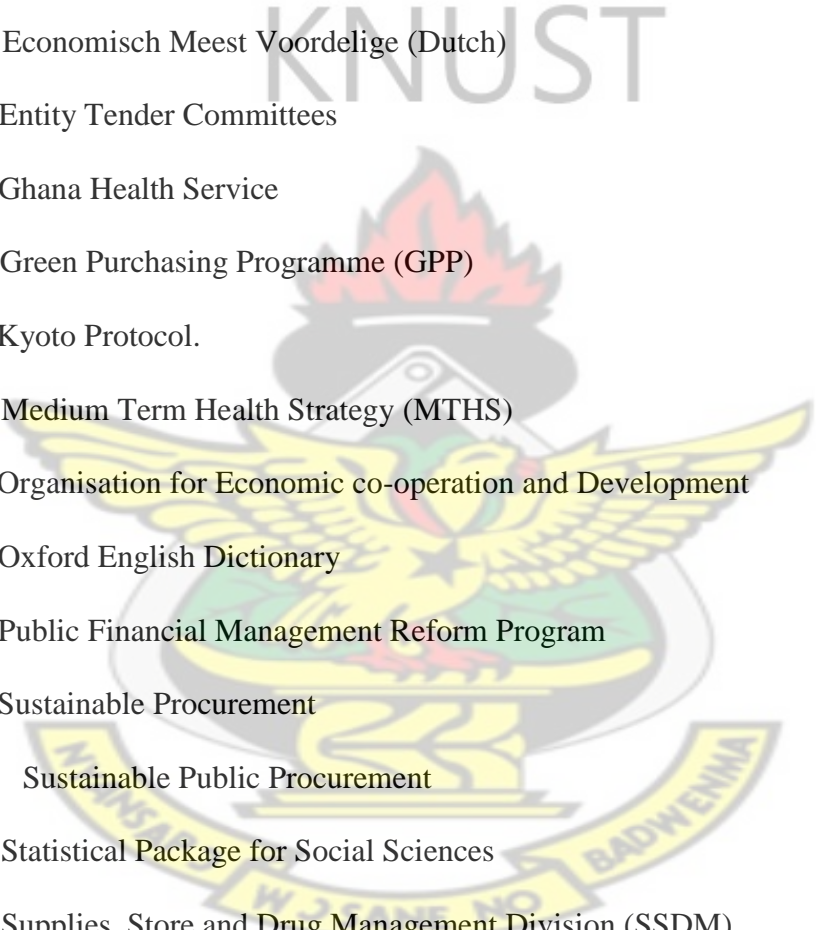
A sustainable procurement policy document should be made available at Ghana Health Service Headquarters. This would ensure enforceability of sustainable procurement practices.

The government should fast track the amendment of the country's Procurement Act; Act 663 of 2003 to include sustainable requirements such as environmental, social and economic issues of sustainability in public procurement.

Keywords: Sustainable procurement, Ghana Health Service, Environmental, Social and economic.



ACRONYMS



BEP	Best Environmental Performance
BSI:	British Standards Institute BSI
EC	European Commission
EMAP	Economic Most Advantageous Proposal
EMV	Economisch Meest Voordelige (Dutch)
ETCs	Entity Tender Committees
GHS:	Ghana Health Service
GPP	Green Purchasing Programme (GPP)
KP	Kyoto Protocol.
MTHS:	Medium Term Health Strategy (MTHS)
OECD	Organisation for Economic co-operation and Development
OED	Oxford English Dictionary
PUFMARP	Public Financial Management Reform Program
SP	Sustainable Procurement
SPP	Sustainable Public Procurement
SPSS	Statistical Package for Social Sciences
SSDM	Supplies, Store and Drug Management Division (SSDM)
STDs	Standard Tender Documents
TRBs	Tender Review Boards
WTO	World Trade Organisation

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background of the Study

Procurement at the public sector is increasingly recognized as an instrument of government policy and a lever for wider economic, social and environmental change (OECD, 2007). There is a debate on the extent to which international regulations allow for a wider view of public procurement than a business process. If countries are mindful of how economic, social and environmental criteria may be used in public procurement without damaging the integrity of the process, then the practice of sustainable procurement needs to be pursued. With sustainability issues becoming important in the developmental agenda of nations, it is time to move the focus of developing countries' public procurement systems from mainly immediate economic advantages to sustainable public procurement systems, which will result in long term benefits. The concept of Sustainable Procurement (SP), which was originally floated at the UN World Summit on Sustainable Development in Johannesburg in 2002, is conceptualized by Borland (2009) to include planetary, environmental, financial and social cultural considerations. These involves looking beyond the traditional economic parameters and making decisions that is based on life-cycle costs, associated environmental and social risks and benefits as well as broader social and environmental implications. Sustainable Procurement processes should result in the balancing of economic development, social development and environmental protection against business needs. Sustainable public procurement can be used as a technique for tackling social disadvantage and exclusion (Boomsma, 2008). This should be able to give consumers/ buyers in general a lot of control over what is manufactured, and how it is manufactured.

Traditional procurement has focused on value for money considerations only whilst Sustainable procurement practice involves achieving value for money on a whole life basis by considering the economic, environmental and social issues associated with the goods and services bought, with the aim of reducing possible adverse effects.

The Ghana's Public Procurement Act, Act 663, as it stands now, seems to address only a few of the sustainable public procurement issues (section 59 of Act 663). The challenge is how to possibly include economic, social or environmental considerations in the process while ensuring that government decisions are fair and transparent. Public procurement has increasingly become a global concern.

In developed as well as developing countries, disregarding their economic, social, and political environment, a sound procurement system has accomplish two sets of requirements: management requirements and policy requirements. The procurement management requirements normally include quality, timeliness, cost (more than just the price), minimizing business, financial and technical risks, maximizing competition, and maintaining integrity. The procurement policy requirements normally include economic goals (preferring domestic or local firms), environment protection or green procurement (promoting the use of recycled goods), social goals (assisting minority and woman-owned business concerns), and international trade agreements. It is very difficult for policy makers and public procurement practitioners to make an optimal decision, as there are always tradeoffs among these goals (Federal Acquisition Institute, 1999; Thai, 2001).

The purpose of this study is to ascertain the extent to which public sector especially Ghana Health Service embraces sustainable procurement considerations.

Also, to identify the challenges faced in the implementation of sustainable procurement practice in Ghana Health Service and provide recommendations.

1.2 Problem Statement

The Government of the Republic of Ghana took a significant step in December 2010 when it made a public commitment to developing a Sustainable Public Procurement (SPP) policy as part of its national strategy for sustainable development. Implementing this policy, Ghana will be the first African country to adopt a national policy on SPP. But this has not been fully implemented in public procurement activities. *Source: Swiss–Ghana Project on Sustainable Public Procurement (www.iisd.org © 2012 .International Institute for Sustainable Development).*

- ❖ Lack of understanding of the sustainable procurement concept and the higher initial costs associated with SP are the major challenges facing SP practice in the Ghanaian procurement landscape. Because, there is no policy document as at now that provide the necessary guide on how organizations should practice the concept of sustainable procurement in Ghana.
- ❖ The laws governing procurement in Ghana have not enforced that all procurement transactions are to fulfill sustainability goals.
- ❖ The purpose of this study is to identify the level of awareness of sustainable procurement practices at Ghana Health Service Headquarters.
- ❖ Also, to identify the challenges faced in the implementation of sustainable procurement practice in Ghana Health Service and provide recommendations.

1.3 Aim of the Study.

The main objective of this study is to assess the sustainability of procurement practices in Ghana Health Service.

1.4 Specific Research Objectives

To achieve the goal, below are the following specific objectives:

1. To identify, the level of awareness of sustainable procurement practices at Ghana Health Service.
2. To assess sustainable procurement practices in Ghana Health Service, Headquarters.
3. To identify if there is policy document in place to procure sustainably by considering the environment, social and economic factors.
4. To identify the challenges faced in the implementation of sustainable procurement practice in Ghana Health Service and provide recommendations.

1.5 Research Questions

1. What is the level of awareness of sustainable procurement practice in Ghana Health Service, Headquarters Accra?
2. What are the sustainability procurement practice considerations in defining contract requirements at Ghana Health Service (Headquarters, Accra)?
3. Does Ghana Health Service face some challenges in the implementation of sustainable procurement practice?
4. Is there a policy document in place to procure sustainably by considering the environment, social and economic factors at Ghana Health Service?

1.6 Significance of the Study/ Justification.

UK Government's Sustainable Procurement Task Force (2012), define Sustainable procurement as a purchasing and investment process that takes into account the economic, environmental and

social impacts of the entity's spending. Sustainable procurement allows organizations to meet their needs for goods, services, construction works and utilities in a way that achieves value for money on a whole-life basis in terms of generating benefits not only to the organization, but also to society and the economy, while remaining within the carrying capacity of the environment".

Effective procurement is sustainable procurement that promotes positive outcomes for the economy, environment and society. The public sector should promote sustainable procurement throughout the acquisition and disposition process and sustainability should be embedded in all procurement decision making. (British Standards Institute BSI, (2010).

The study will provide relevant information to policy makers, other individuals and groups like contractors and consultants who have interest in the adoption of sustainable procurement practices.

It is against this back drop that this study is important to be carried out for the achievement of value for money on whole-life basis and hence nation development.

This study would be relevant in the following ways:

- ❖ It will help the Ghana Health Service (GHS) to meet environmental goals such as reducing greenhouse gas emissions, improving energy and water efficiency and supporting recycling. The social benefits may include poverty reduction, improved equity and respect for core labour standards and the economic perspective, SPP can generate income, reduce costs and support the transfer of skills and technology.
- ❖ Job creation (e.g. green technologies, use of local suppliers, creating markets for recycled products, and supporting small and medium enterprises.
- ❖ It would enable the Public Sector's Procurement Managers to be proactive in their sustainability practices.

- ❖ It would serve as a secondary source of information for other researchers on similar research topic.
- ❖ Moreover, effective sustainable procurement practice will help in promoting transparency, fairness, efficiency, reduction in corruption, building public and donor trust as well as confidence in public procurement systems.

1.7 Scope of the Study

The Health Sector of Ghana, it is a broad area that the researcher alone cannot research into it. Therefore, the researcher would limit his study to Ghana Health Service Head Quarters, Accra. Also, the study would cover some environment, social and economic aspect of sustainable procurement. The time available is three months to complete the project work.

1.8 Organisation of the Study.

The research study will be made up of five chapters detailed below:

The chapter one includes background of the study, problem statement, and research questions, objectives of the study, significance of the study, scope of the study and the organization of the study. The second chapter presents literature on theoretical and empirical relevance to the chosen topic. The chapter three presents the methodology of the study where data requirement and sampling procedures as well as analytical tools would be covered. The fourth chapter is devoted purposely to analysis and interpretation of data. Finally, the summary of finding the work as well as conclusions and recommendations of the research work would be presented in chapter five of the research work.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of the theoretical framework of the thesis. It includes both literature relevant for a general understanding of the research topic and theories that have been used more specifically to interpret and analyze empirical findings.

2.2 Brief History of Ghana Health Service

The Ghana Health Service (GHS) is a Public Service institution established under Act 525 of 1996 as required by law, the 1992 constitution. It is an autonomous Executive Agency responsible for implementation of national policies under the control of the Minister for Health through its governing Council - the Ghana Health Service Council. The GHS continue to receive its public funds and thus remain within the public sector. Moreover, the employees will no longer be part of the civil service administration, and GHS managers will no longer be required to follow all civil service rules and procedures. The independence of the GHS is designed primarily to ensure that staffs have a greater degree of managerial flexibility to carry out their tasks, than would be possible if they remained wholly within the civil service set up. Ghana Health Service does not include Teaching Hospitals, Private and Mission Hospitals in Ghana.

Rationale

The establishment of the Ghana Health Service (GHS) is an essential part of the key strategies identified in the Health Sector Reform process, as outlined in the Medium Term Health Strategy

(MTHS), which are important steps in establishing a more equitable, efficient, accessible and responsive health care system in Ghana.

The reforms were built on the reorganization of the MOH that started in 1993, which was explicitly designed to set up the scene for the establishment of the Ghana Health Service. The reforms also provide a sound organizational framework for the growing of managerial responsibility that has already been delegated to regionals and districts hospitals. Themes that were central to the reorganization of 1993 remain important today for the Ghana Health Service: careful stewardship of limited resources, clear lines of responsibility and control, decentralization, and accountability for performance rather than inputs.

Mandate

To provide comprehensive and accessible health service delivery with special emphasis on primary health care at regional, district and sub-district levels in accordance with approved national policies.

Objectives

The objects of the Service are to:

- ❖ To implement approved national policies for health delivery in Ghana.
- ❖ To increase access to good quality health services for the people in Ghana.
- ❖ To manage the limited resources available for the provision of the health services delivery.

Organizational Structure.

Administratively GHS is organized at 3 levels:

- ❖ National level
- ❖ Regional level
- ❖ District Level

Supplies, Store and Drug Management Division (SSDM)

The Directorate is responsible for procurement in the Ghana Health Service is Supplies Stores and Drug Management (SSDM).

The directorate also has the mandate of developing effective policies, sustainable procurement plans, programmes and budgets to cover the procurement and supply of medicines, non-medicine consumables and equipment needs of the GHS in accordance with existing regulations and laid down institutional policies.

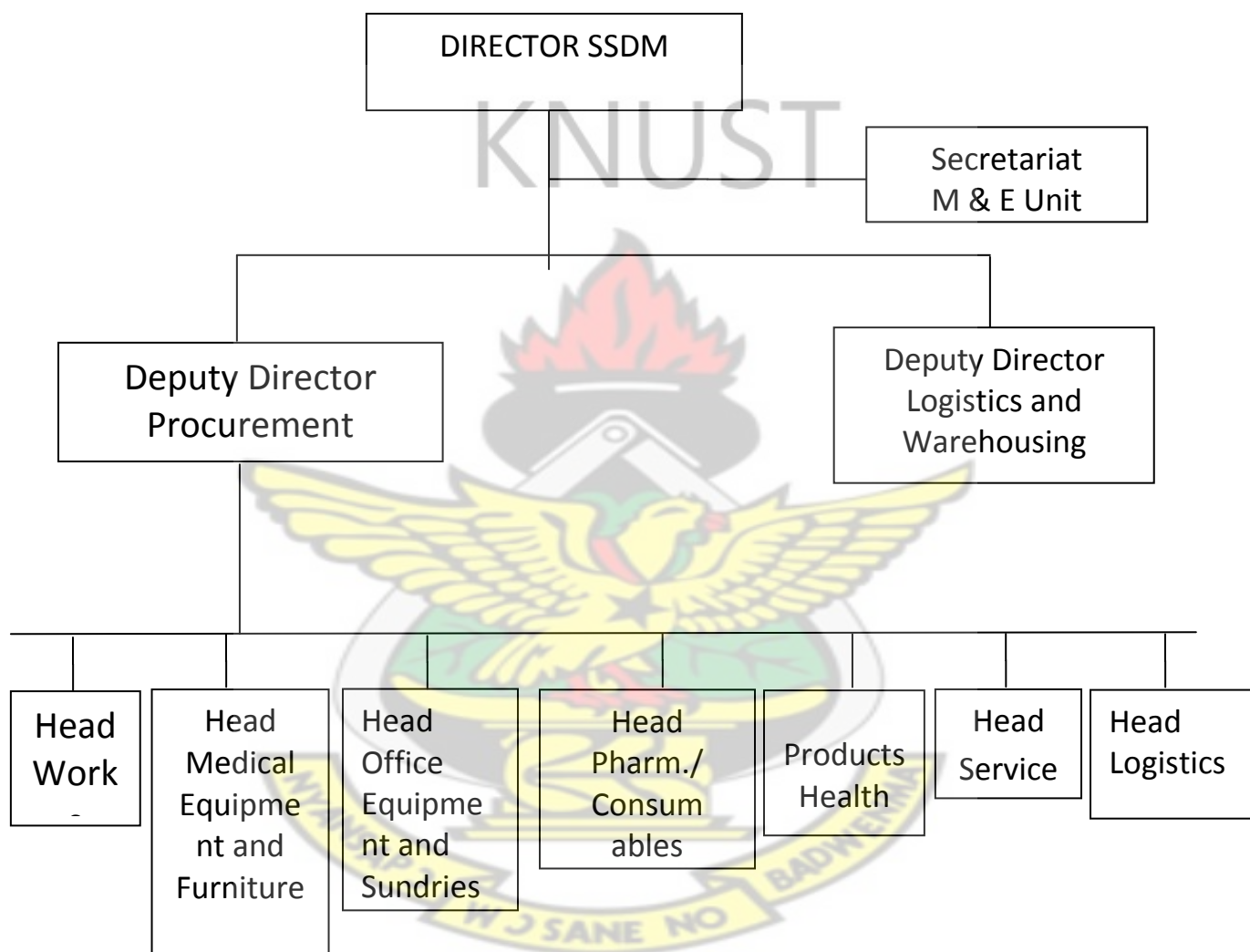
The directorate has the responsibility of ensuring that procurement is carried out in a fair, transparent, competitive, effective and efficient manner.

Strengthening Procurement Management System in GHS by:

- ❖ Providing training to Procurement Officers and focal persons
- ❖ Continuous dissemination of the Public Procurement Act (ACT 663)
- ❖ Supporting Divisions/ Programs to procure goods, works and services to achieve best value for money.
- ❖ To provide timely delivery and Port clearance of health commodities in an efficient manner.

- ❖ To facilitate acquisition of permits and waivers under the Staff Vehicle Incentive Package.

ORGANOGRAM FOR GHS (SSDM)



Source: [Ghana Health Service.org/ SSDM/GHS](http://GhanaHealthService.org/SSDM/GHS).

Nature, Types of Goods, services and works procured

- ❖ Pharmaceuticals products
- ❖ Non -Health Products
- ❖ Assorted Stationeries and Printing materials
- ❖ Equipment for Office and Medical Equipment
- ❖ Furniture
- ❖ Medical Furniture Consultancy and non- consultancy Services
- ❖ Security Services
- ❖ Maintenance Services
- ❖ Hotel Services
- ❖ Renovations and New Constructions
- ❖ Vehicles, motorbikes and bicycles services.

Objectives of the Division

- ❖ To develop comprehensive policies, sustainable plans, programmes and budgets to cover procurement and supply of drugs and equipment needs of the Ghana Health Service and according to laid down policy of the organisation.
- ❖ To ensure that, there are availability of drugs and equipment throughout the facilities of the Ghana health services in Ghana.
- ❖ Ensure that the Services provided receives value for money and avoid waste in the procurement system.
- ❖ Promote high drug's efficacy preservation and safe chemical handling in Regional/District

Medical Stores and all hospitals.

The Functional Authority and Responsibilities

Director

Divisional Director is responsible for the its core functions of the Division and exercise of authority by the Director is derived from and consistent with his responsibilities as well as authority delegated to him by the immediate superior. The superior authority of the DG/DDG guides the exercise of authority but the coordination and development of strategies for the execution of the core functions is the responsibility of the Director and his deputies. The Director coordinates and mediates departmental and interdepartmental issues.

Core Functions

- ❖ Is to undertake a periodic review of drug and chemical situation of the Service and that of its program implementation partners with a view to improving on efficiency and quality of all health products.
- ❖ To help develop and collaborate with the PH/ ICD/PPME Department, a national procurement management plan for the short, medium and long term consistent with the Services program of work;
- ❖ To procure drugs and equipment based on laydown national policies and existing legislature.
- ❖ To coordinate and manage supply and distribution activities of all drugs and non-drug logistics of both local and international to carry out the inspection and provide support to all levels and partners of the Service in drugs and chemicals handling.
- ❖ To collaborate with the HRD Division to constantly to evaluate and develop appropriate capacity for drugs and logistics management personnel for all the appropriate units of the health service.

- ❖ To provide national information base on the national drugs and supply situation of GHS.
- ❖ To help undertake periodic drug educational campaigns in collaboration with the PH and ICD Sections.

Departments

- ❖ Procurement Department
- ❖ Logistics, Clearing and Warehousing Department

Procurement Department

VISION

The procurement department is to enhance the health service delivery by ensuring that all non-pay spend of the GHS are managed according to best practices in procurement.

MISSION

To provide responsive, and quality expert procurement services and business advice to GHS Headquarters, Directorates, Regional Health Administrations and other Disease Control Programmes, while achieving best value for money and ensuring competitive, fair and transparent process in accordance with established procurement strategy, procedures, rules and regulations to achieve unequalled international standards in procurement.

OUR OBJECTIVES

We aim at providing best value for money in the timely delivery of goods, service and capacity to enable our customers to execute their duties and achieve their objectives within a fair and transparent commercial partnership provided by our vendors

MAIN DUTIES/ RESPONSIBILITIES

The responsibilities and duties are for the development of long term, medium term and annual procurement plan for GHS strategic plans of action.

The Department has to liaise with government and international procurement agencies for the purpose of procuring drugs and equipments for the GHS consistent national and international procurement legislations aimed at operating within the Public Procurement Authority's (PPAs) procurement legislation and the GHS' Procurement manual also, contributing towards the achievement of the corporate objectives and the MDG4-6, by:

- ❖ Provide and manage a quality, fit for purpose, professional purchasing and supplies service to support the RMS' within the GHS in Ghana.
- ❖ Promote strategic procurement issues across the GHS with a view of increasing savings by efficient and effective procurement arrangements to reduce costs and make significant contributions to value for money releasing resources to help improve patient care.
- ❖ To plan, coordinate and manage specific supplies related projects by securing best.
- ❖ To provide price arrangements in the most efficient and cost effective and quality manner.
- ❖ To investigate, coordinate and manage complex procurement enquiries/ projects, provides advice and contributes to corporate reporting as required.
- ❖ Supporting the of Director SSDM by facilitating the flow of information and assisting in the positive development of internal and external relationships in pursuit of

common objectives in supplies matters.

STAFF FUNCTIONS

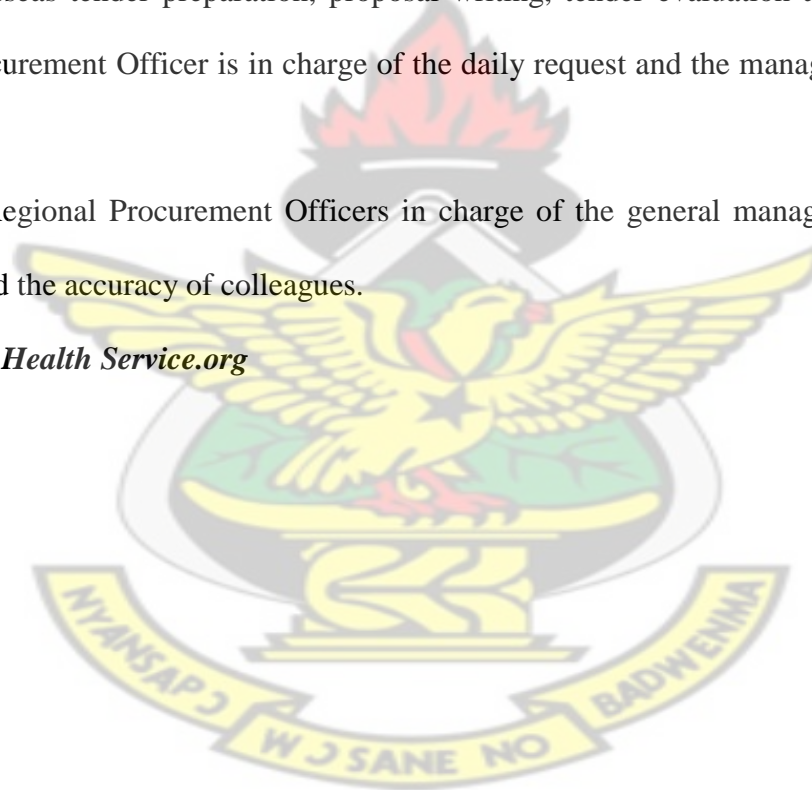
The Deputy Director in charge of corporate procurement. He is directly in charge of the GHS procurement strategy, policy definition, planning and the implantation of corporate procurement management arrangements.

The Procurement Manager is in charge of providing operational technical advice to junior colleagues, overseas tender preparation, proposal writing, tender evaluation and contract award.

The Senior Procurement Officer is in charge of the daily request and the management of contracts and follow-up.

There are ten Regional Procurement Officers in charge of the general management of Regional Procurement and the accuracy of colleagues.

Source: Ghana Health Service.org



2.3 Definition of Public Procurement

According to Lyson, (1996) organizational procurement may be defined as that function responsible for obtaining by purchase, lease or other legal means, equipments, materials, supplies and services required by an undertaking for use in satisfying wants. The definition of the overall purchasing task is “to obtain materials, goods and services at the **right quality**, in the right **quantity** from the **right source** delivered to the **right place** at the **right time** at the **right price**, to achieve an organizational objective.

Public Procurement, according to the Public Procurement Act, 2003 (Act 663), is ‘the acquisition of goods, works and services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations, or individuals, generally via a contract’ (PPA Module, 2007). In other words, Public Procurement is the process by which organizations acquire goods, works and services using public funds. It is a comprehensive process that runs from proper procurement planning, budget allocation, bids invitation, bids evaluation, award of contract, contract management, performance measurement, monitoring, auditing and reporting.

2.4 The Public Procurement Reforms in Ghana

The Public Financial Management Reform Program (PUFMARP) was launched in 1996 by the Government of Ghana with the aim of improving the overall public financial management in Ghana. In 1999, the Government of Ghana established the Public Procurement Oversight Group to manage the development of a comprehensive public procurement reform program. The Public Procurement act, 2003, (Act 663) has established Public Procurement Authority (PPA) as a body corporate charged with the oversight responsibility for the effective implementation of the Act.

The object for PPA is to secure a judicious, economic, and efficient use of public funds in a fair, transparent and non-discriminatory manner while promoting a competitive Local industry.

2.5 The Legal and Regulatory Framework of Public Procurement

The Public Procurement Act, 2003 (Act 663).

The Public Procurement Act, 2003 (Act 663) set out the legal, institutional and regulatory framework to secure fiscal transparent and public accountability in Ghana's procurement system. The Act establishes five basic principles upon which the public procurement is based World Bank, 2003). These pillars are: the legal and institutional framework; standardized procurement procedures and tender documents; independent control system; proficient procurement staff; and anti-corruption measures.

The objectives of Act 663 are to harmonize public procurement processes in the public sector to ensure judicious, economic and efficient use of public resources and to ensure that public procurement functions undertaken within the public sector are fair, transparent and nondiscriminatory.

The Act applies to procurement financed wholly or partly from public funds for the procurement of goods, works, services and procurement financed by loans contracted by the government of Ghana, including foreign aid and donor funds.

The Public Procurement Act 663 establishes the Public Procurement Board (PPB) now PPA, Entity Tender Committees (ETCs) and Tender Review Boards (TRBs). It specifies in clear terms the laws for procurement methods and thresholds, procedures, appeals and complaints resolution procedures and disposal of stores. It authorizes the issuance of enforceable regulations, Guidelines, Standard Tender Documents (STDs) and Manual under the Act.

2.6 The Concept of Sustainable Public Procurement

Public procurement is the overall process of acquiring goods, works and services on behalf of a public authority (Hilse 1996; IISD 2007). It is in essence a question of matching supply and demand, just as with any private procurement procedure. Public contracting authorities however, have to exercise special caution when awarding contracts, because they handle public funds and are accountable to tax payers. Public procurement laws and procedures can differ from country to country and also between national governments, state-owned enterprises and local governments. There are generally two underlying principles to be observed within public procurement. These principles are best value for money by ensuring cost-efficiency through competition, and fairness to ensure a level playing field for market participants by applying procedures that safeguard non-discrimination, equal treatment, transparency, and proportionality (Hilse 1996; IISD 2007; European Commission 2011 b).

In 2002, the *World Summit on Sustainable Development* acknowledged that public procurement can contribute to achieving sustainable development goals and the *Johannesburg Plan of Implementation* effectively institutes SPP as a crosscutting issue (WSSD 2002). The plan encourages public procurement practices that stimulate development and diffusion of environmentally sound goods and services and promotes the integration of the three pillars of sustainable development which are economic development, social development and environmental protection. These pillars are interdependent and mutually reinforcing components. Consequently, a concept described as linkage by McCrudden has become increasingly important for the public sector. A linkage is the act of participating in the market as a purchaser and at the same time regulating it through the use of its purchasing power to achieve environmental goals or social justice (McCrudden 2004).

2.7 Definition of Sustainable Procurement

Sustainable Development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (**United Nations 1987, 1**). The most regularly cited definition for sustainable procurement originates from the *United Kingdom Sustainable Procurement Task Force* and coherently builds on this concept. The Task Force defines sustainable procurement as “a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy whilst minimizing damage to the environment” (DEFRA 2006, 10). In other words, sustainable public procurement is where the concept of sustainable development and public procurement meet.

Sustainable Development

Development that meets the needs of present the without compromising the Ability of future generations To meet their own needs.

Public Procurement

Overall process of acquiring goods, works and services on behalf of a public authority.

Sustainable Public Procurement

Three pillars:

Economic
Environmental
Social

Guidelines principles:

Best value for money
Acting fairly

Sustainable Development and Public Procurement (Based on WCED definition of Sustainable Development) (United Nations 1987, 1. Author’s illustration).

2.8 Definition of Sustainable

The definition of sustainable is, according to the Oxford English Dictionary (OED) (2007), “Involving the use of natural products and energy in a way that does not harm the environment”. Another widely accepted definition is: “Sustainable consumption is consumption that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). In the context of the Dutch public procurement programme, sustainability is defined as the right balance between People, Planet, and Profit (Elkington, 1999). Within the Dutch sustainable public procurement programme People represents social aspects such as labour conditions and exclusion of child labour. Planet represents environmental aspects, e.g. energy use, carbon dioxide emission, wastewater, and landfill. Profit represents a healthy economic situation, with realistic profit margins for all involved in the supply chain.

2.9 Public procurement to stimulate sustainability

Using the public procurement function to stimulate the procurement of sustainable products is emerging. Many reports have been written to promote the use of the public procurement function for stimulating sustainable production and consumption. (European Commission, 2004; ICLEI, 2007; OGC 2008; SN, 2009; PWC et al., 2009).

Sustainability

Health supply chain sustainability can be described as the ability of a health system to maintain the various factors that drive supply chain performance. The factors considered here are the same structural, capability-based, and structure-capability fit factors described previously. As a result of the multiple factors that can contribute, sustainability represents a complex framework with significant overlap with other strategic framework directions.

As such, it is practical to subdivide sustainability into the following subgroups:

1. **Structural sustainability.** The ability of a health system to maintain non-human resources needed for performance.
2. **Skillset sustainability.** The ability of a health system to maintain the human skill needed for performance.
3. **Motivation sustainability.** The ability of a health system to maintain worker motivations needed for performance.
4. **Structural-capability fit sustainability.** The ability of a health system to maintain the appropriate fit between the structure and capability needed for performance.

Structural Sustainability

Although financial resources are only one of the structural factors that contribute to sustainability, they have generally received most of the attention when sustainability is being considered. Still other non-human resources are required for performance; ideally, structural sustainability should include some consideration of those resources, as well. We, therefore, consider structural sustainability to be focused on the efficient use of existing resources, maintenance of these resources to ensure their effective life is as long and inexpensive as possible, and options for replenishing these resources—revenue generation, equipment

Skillset Sustainability

Skillset sustainability is focused on the efforts to acquire adequately trained individuals, either through training or directly from the labor market; and to keep them in the health system. Turnover is probably the most significant challenge to skillset sustainability in the public sector.

Motivation Sustainability

Motivation sustainability that focused on the efforts and mechanisms required to keep the health system workforce generally motivated for supply chain performance; and then, specifically, motivated along the individual performance directions that are appropriate for the health supply system. These mechanisms represent both implicit drivers—for example, performance cultures—and explicit drivers—for example, financial schemes—to reward performance. Usually, with funding, explicit drivers of motivation are simpler to maintain than implicit drivers, such as performance culture.

Structural-Capability Fit Sustainability

This sustainability is focused on the interdependence between the factors driving supply performance to ensure that the dynamics between the factors help drive performance in a positive, rather than negative, direction. The source for this sustainability is usually the executive decision maker and management level of the health system. Here, those with oversight and discretion over the design of the system and allocation of its resources must monitor this fit and take action to realign it, when necessary.

2.10 The Swiss-Ghana Sustainable Public Procurement Project (SPP)

The Swiss-Ghana Sustainable Public Procurement Project is a three (3) year project being implemented by the Public Procurement Authority and financed by the Swiss Government with a \$ 2.7 million grant. The project's aim at improving the public procurement practices of the Government of Ghana by introducing sustainable public procurement in the public sector.

Ghana has been involved for the past years in the field of Sustainable Public Procurement through the Marrakech Process. SPP is one of the areas where Ghana is a key player and form part of the Marrakech Task Force (MTF) on Sustainable Public Procurement (SPP), which is led by the Switzerland. Ghana is considered to be among the few developing countries to be ready to undertake the SPP.

The project will achieve its aim through:

- ❖ The establishment of the Ghana Task Force on Sustainable Public Procurement-a multi-stakeholder group to lead the process of introducing sustainable public procurement.

Ghana Task Force on Sustainable Public Procurement

- ❖ Development of Government Policy on SPP
- ❖ Awareness creation programmes for public organizations, procurement officers and procurement boards on SPP
- ❖ Training of procurement officers, practitioners, consultants on SPP
- ❖ Re-design of Standard Tender documents
- ❖ Training private sector on SPP.

2.11 The role of Government in Sustainable Public Procurement Project (SPP)

Government of Ghana is responsible to provide public goods and services. To fulfill this responsibility, the Government needs to procure. Governments commission road works, build lorry stations and airports, roll out utility networks, and build hospitals, schools and houses. They also contract catering and landscaping services, buy paper, computers and furniture for public offices. Government of Ghana procurement constitutes over 50% of the government budget. The goods,

services and works governments procure have economic, social and environmental impacts. The Government will therefore make a difference and contribute to sustainable development if it buys goods and services that have been designed, produced and supplied having factored in the environment and social risks. (<http://spp.ppaghana.org/>. 18 Aug 2014 05:10:59 GMT).

2.12 The SPP Task Force

There is an international taskforce spearheading sustainable public procurement, and Ghana is a member. It is the only African country on the taskforce. Other members are drawn from China, Indonesia, Philippines, Argentina, El Salvador, Sao Paulo, Austria, Czech Republic, Norway, Switzerland, and United Kingdom.

The objective of the taskforce is to promote and support the implementation of Sustainable Public Procurement, by developing tools and supporting capacity building in both developed and developing countries. Its functions are to:

- ❖ Develop a practical Toolkit to give the various stakeholders in the procurement process an easy start to implement the concept of Sustainable Public Procurement;
- ❖ Carry out research and prepare background documents in SPP;
- ❖ Promote the implementation of SPP through pilot projects;
- ❖ Facilitate the dialogue and work among different countries and stakeholders interested in SPP.

2.13 SPP IMPLEMENTATION

The implementation of SPP concept in public procurement should be a strategic rather than a short term process. The approach should involve the following, among others:

- ❖ Set up a national taskforce for SPP implementation;
- ❖ Draw up an implementation plan;
- ❖ Public education and training to create awareness; training of entities;
- ❖ Mainstreaming social and environmental issues into the Procurement Act;
- ❖ Ensuring the infusion of SPP issues into the existing procurement processes;
- ❖ Mobilisation of interested parties e.g. EPA, Energy Commission, AGI, TUC, etc;
- ❖ Establishing indicators to measure SPP operations and impact;
- ❖ Mobilising budgetary support for SPP activities.

AB Adjei - The 4th International Public Procurement Conference, ..., 2010 - ippa.org

2.14 Promoting a Sustainable Procurement

AGENDA GHANA'S EXAMPLE.

Sustainable Procurement should be run through deliberate national or municipal level policy implementation backed by legal instruments. Strong political will and leadership to drive the implementation process is required for its successful implementation. Institutional buyers' focus on upfront savings and profit maximization would have to be redirected to include consideration of sustainability issues to enhance social equity, economic advancement and environmental sustainability. This may necessitate legal/legislative compulsion, in combination with incentives.

There is need to train compliance inspectors for successful Sustainable Procurement implementation. Ghana's public procurement is regulated by an Act of Parliament which was passed into law in December 2003, Act 633. Section 59 of Ghana's Public Procurement Act, 2003 (Act 663) includes some Economic and social sustainable issues. The emphasis as outlined in Section 59 is on the Economic aspect. Despite this, some Economic sustainable issues have also

not been integrated into the procurement processes. There are few social considerations, with virtually no consideration on Environmental issues.

The Environmental aspect, though not captured in the law, has standalone regulations on issues like Energy Efficiency Standards, Pesticides Control and Management, reduction in greenhouse gas emissions, Forest & Wildlife management, Mining and others.

On the Social side, Ghana's labour Law, Act 651 of 2003 addresses issues like:

- ❖ **Equal Opportunity for Employment,**
- ❖ **Occupational Health & Safety,**
- ❖ **TUC-Employers dialogue,**
- ❖ **Child labour, among others**

These are sustainability issues (for supplier compliance) that are not integrated into Act 663. Also, the Draft Bill on the Physically Challenge when passed into law can influence public procurement once it becomes a requirement under Act 663. There are however some Social issues in the procurement Act, Act 663 that have not yet been mainstreamed into the procurement process. For example Section 59 (4c) considers the effect acceptance of a tender will have on encouragement of employment in Ghana.

2.15 Sustainability Issues in Procurement Laws of Other Countries

Like Ghana, most countries also have SPP issues in their procurement and other laws and regulations. Each country has to search its laws/regulations for sustainability issues and try to bring them under the procurement law/regulations for ease of application.

Tanzanian's policy document on SPP

The primary objectives of the document are:

- ❖ Procurement in the public sector should take place with the minimum of environmental impact and with respect for fundamental workers' rights and human rights.
- ❖ Environmental and ethical/social considerations in public procurement shall contribute towards an efficient public sector and a competitive business sector.
- ❖ Section 12 (1) of the Tanzanian Procurement Regulation of 2005, states "A procuring entity shall avoid wherever possible the procurement of chemicals, pesticides or other goods which are known to have or suspected to have harmful effects on the health of the population, the environment, domestic animals, wildlife and flora".

Botswana's policy document on SPP

Economic and social objectives and procurement clause: "The Government may from time to time introduce reserved and preferential procurement schemes. The schemes referred to shall apply to specific, disadvantaged women's communities and regions and areas subject to occasional calamities"

Gambia's policy document on SPP

The Authority is required under section 37(2) of the Procurement Act, to identify and promote ways of facilitating participation by small enterprises in public procurement. Such measures may include, for example: Establishing small-enterprise set-asides (may be total, partial, or limited to a particular region); and in the event of equal low bids, making awards first to small enterprises.

All the issues discussed under the various laws and legislations are sustainability issues though it could be argued that they appear to be protective clauses which may infringe upon WTO equal

opportunity provisions. An example of Social sustainable issues in a tender document may include a clause or have as part of its specification:

- ❖ that “products that contribute to ozone layer depletion are excluded”.
- ❖ that “suppliers that use child labour in their production are excluded”; or
- ❖ “suppliers that do not administer fair wages are excluded”.

2.16 Drivers for Sustainable Public Procurement

Summarises the main drivers for sustainable public procurement identified through the existing body of literature.

Drivers for sustainable public procurement Drivers:	References:
The government's example function for society.	EC (2004), Nissinen et al. (2008)
Increasing the national competitiveness.	New et al., (2000) as cited in Walker et al., (2008).
Sustainable public procurement can create price reduction, considering life cycle costing (LCC) approach.	Lu et al. (2007), EC (2004), ICLEI (2007), PWC et al. (2009)
Sustainable public procurement can help to reach political environmental and social targets.	Lu et al. (2007), Handfield et al. (2001), ICLEI (2007), OGC (2008), Carlsen and Callender (2009).
Demanding sustainable products can stimulate innovation.	Lu et al. (2007), ICLEI (2007).
Climate change and depletion of resources.	Handfield et al. (2001), EC (2004), OGC (2008), Nissinen et al. (2008), Carlsen and Callender (2009).
Meeting customers' expectations.	Lu et al. (2007), ICLEI (2007), Hampson et al. (2009), New et al., (2000) as cited in Walker et al., (2008).
Reduce energy use.	Nissinen et al. (2008).

2.17 Buying into Sustainability?

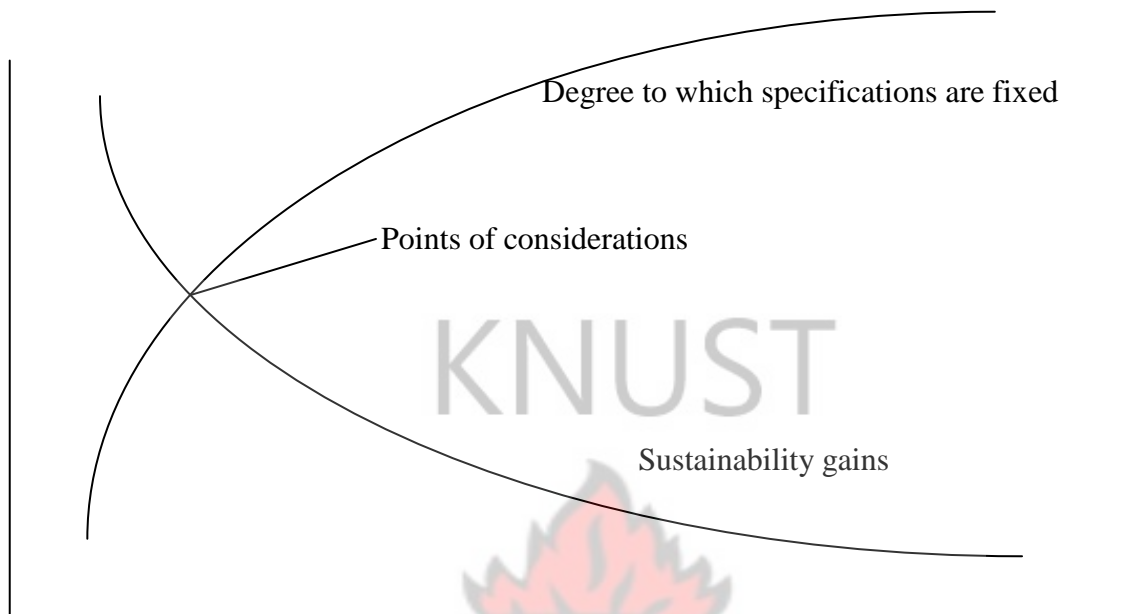
One might wonder how well the issue of green purchasing fits into the paradigm of sustainable development, as the latter addresses not only the *use* of resources, but also the *distribution* of these. The idea of buying ourselves into sustainability might therefore be rejected for merely putting a green face on current practices. Some advocates of sustainable development that emphasize that the use of products should be drastically minimized in the first place, i.e. the issue of sufficiency should be emphasized, as well as connected to the issue of equal distribution of resources, therefore disagree with the GPP concept as such. Green purchasing is thus, perhaps, best described as a more pragmatic idea that has been adopted within developed countries and the ideology of “ecological modernization” (Conca & Dabelko (2004). The concept refers to a direction of development, which is based on the idea that it is possible to improve the environment through technological advances, market-based incentives and reforms in production systems and management practices, without compromising with existing economic, social, and political structures.

From such a perspective, environmental problems should be tackled through environmental policies and instruments, slowly generating a systematic shift of the current practices. The concept “seems to offer a practical set of principles and techniques for dealing with the problems facing advanced industrialized countries” (Carter,2003).

2.18 Sustainable Procurement Process

In achieving sustainable procurement objectives can be exerted at the start of the procurement process. During the preparatory stage of procurement, the basic principles governing the entire procurement process are established: what to buy and how to buy (NL Agency 2011).

The diagram below shows the potential for sustainability gains.



NL Agency 2011.

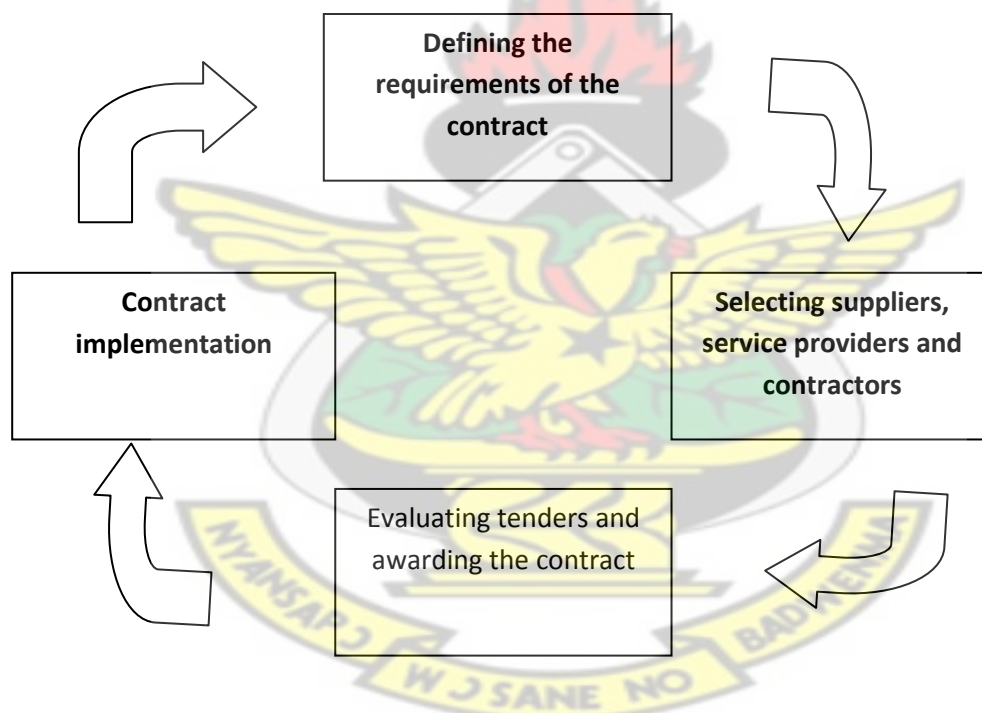
Preparing for the procurement process (NL-Agency 2011) Sustainability strategies should to be applied to identify potential sustainable procurement options. Sustainability strategies include sufficiency, consistency and efficiency (Schaltegger & Petersen 2010).

The sufficiency strategy means that the need should be identified to avoid unnecessary purchases. The consistency strategy relates to the level of innovation to deliver sustainable solutions. Market research should be conducted to determine if new technologies, new products, new innovative suppliers or advances in sustainable business Concept for mainstreaming SPP in developing countries practices could meet the operational requirements. The efficiency strategy refers to maximizing process efficiency. A good way to use an efficiency strategy is to establish a procurement cooperative to bring similar purchasers together or use framework agreements to leverage environmental, social, and technical and market knowledge. The efficiency strategy might

also support increased supplier diversity. For example, contracts can be divided into smaller lots to make public procurement more accessible for small and medium enterprises.

2.19 Stages of the Public Procurement Process

The public procurement process itself can be grouped into four main stages. The first stage is to define the requirements of the contract. The next three stages are to select suppliers and service providers, evaluate tenders and award the contract, and contract implementation including performance and relationship management.



The procurement process (UNDP & UNEP 2011, 4)

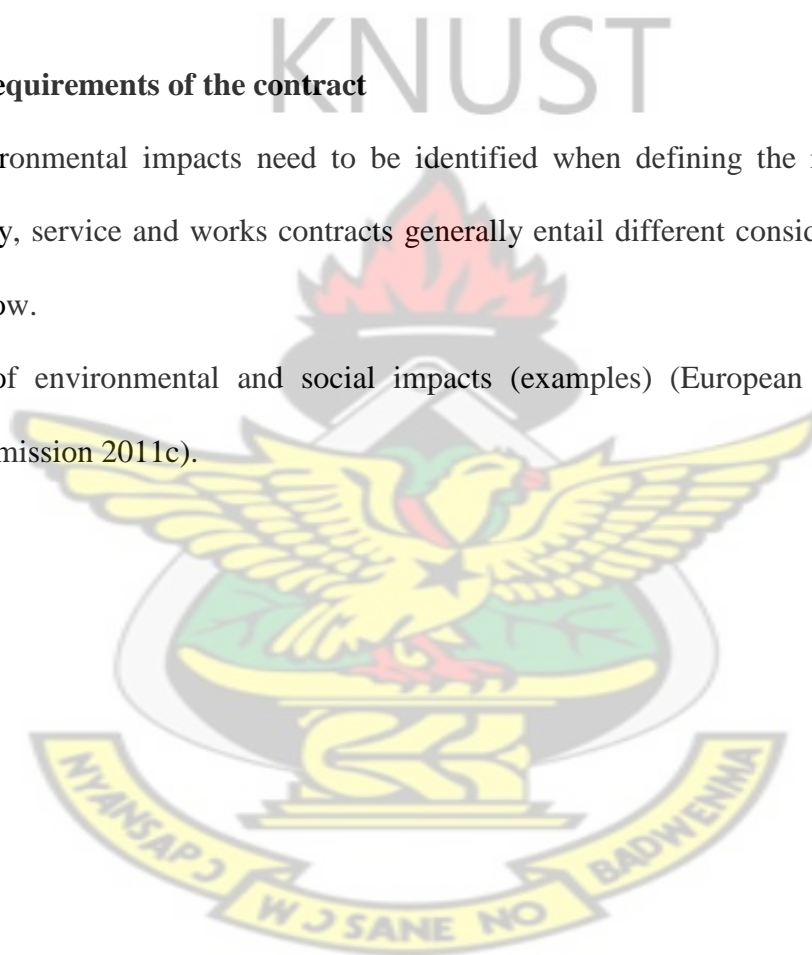
The use of sustainability criteria requires judgment on behalf of the buyer. Each procurement need has different sustainability impacts, and each country or organization has different sustainability priorities, goals and legal frameworks.

There is no standard blueprint for a sustainable public procurement process. The following is a compilation of opportunities that have emerged in Europe (European Commission 2010; European Commission 2011b; Berry 2011; Deutscher Städtetag et al 2009). This generic sustainable procurement process should be adapted to the national legislative and regulatory SPP framework of each developing country where SPP is implemented.

Defining the requirements of the contract

The main environmental impacts need to be identified when defining the requirements of the contract. Supply, service and works contracts generally entail different considerations as outlined in the table below.

Identification of environmental and social impacts (examples) (European Commission 2010; European Commission 2011c).



Identification of environmental and social impacts (examples)		
Possible environmental Impacts of supply and works contracts:	Possible environmental Impacts of service contracts:	Possible social concern:
Material used to make the product	Technical expertise and qualifications of staff to carry out the contract in environmentally friendly way	Social standards linked to the actual supplies, for example accessibility standards for persons with disabilities
Production processes		
Use of renewable raw materials		
Energy and water consumption during use	Products/materials used in carrying out the service	Reservation of contracts for sheltered workshops (usually only possible under certain conditions)
Greenhouse gas emissions and air pollutants		
Durability/lifespan	Management procedures put in place to minimize the environmental impact of the service	Measures to avoid accidents at work and conditions for safe storage of dangerous products to safeguard health and safety of workers
Opportunities for recycling/ reusing the product at the end of the life		
Packaging and transportation	Energy and water consumed, and waste generated in carrying out the service.	

2.20 Potential Benefits and Barriers of SPP in Developing Countries.

There are many benefits of SPP which are often mutually reinforced. For example, green technologies generate economic benefits such as job and wealth creation, social benefits such as employment and skill development and environmental benefits such as efficient use of resources. At the same time, scientific evidence on the impacts of SPP is rare and there are perceived or actual barriers that limit the uptake of SPP, especially in developing countries.

2.21 Potential Benefits

Environmental dimension

Public authorities, due to their importance as customers, can have a positive influence on environmental challenges through SPP. They can contribute to meeting environmental challenges such as

- ❖ **Climate change**
- ❖ **Soil degradation**
- ❖ **Biodiversity loss**
- ❖ **and access to fresh water.**

The procurement process (UNDP & UNEP 2011, 4).

Public authorities can contribute by reducing the risk of negative environmental impacts on health, safety or wellbeing of a nation or an ecosystem caused by public procurement. Public authorities can also generate savings in waste reduction as well as resource consumption and conservation. Considerations in the procurement process include:

- ❖ Material used to make products procured,
- ❖ Production processes,
- ❖ Use of renewable raw materials,
- ❖ Energy and water consumption during use,
- ❖ Greenhouse gas emissions
- ❖ Air pollutants
- ❖ Durability
- ❖ Product lifespan,
- ❖ Opportunities for recycling
- ❖ Or reusing the product,
- ❖ Waste,
- ❖ Packaging
- ❖ And transportation.

In doing so, SPP can support a stated national environmental policy, ensure conformance with adopted international environmental conventions, and contribute to achieving international targets such as the reduction of greenhouse gas emissions laid out in the **Kyoto protocol**. There is also a high potential for environmental benefits at the local level. For example, procuring non-toxic cleaning products can create healthier conditions for school children and the use of low-emission buses for public transportation can improve local air quality (*European Commission 2011c; United Nations 2008; The World Bank 2011b*).

Social Dimension

Similarly, SPP can contribute to enhancing compliance with national and international social and labor laws. Further SPP can enhance commitments to social development goals such as the basic ILO Conventions, which ban forced and child labor, establish the right to form trade unions and ensure non-discrimination. SPP can contribute to improving living conditions and reducing poverty in developing countries by promoting voluntary social standards such as Fair Trade. SPP can also stimulate social justice and social inclusion. South Africa, for example, has introduced system to promote the advancement of people historically disadvantaged by unfair discrimination on the basis of race, gender or disability. In Brazil, a Potential benefits and barriers of SPP in developing countries law introduced in 2007 established criteria aimed to increase participation of small businesses in procurement. Overall, social factors include recognizing equality and diversity, complying with core labor standards, ensuring fair working conditions, increasing employment and skills, and developing local communities (European Commission 2010; United Nations 2008; IISD 2007; UNEP 2012d).

Economic Dimension

The upfront purchase price of a product or service is only one element of the total cost of ownership. To ensure value for money over the longer term, establishing the lowest whole-life cost of a product can result in significant financial savings. A structured approach can be used to produce a spend profile of the product or services over its anticipated life span, including cost for purchase, use, maintenance and disposal. In some cases even upfront cost for sustainable products are lower due to sustainable production processes. The cost for societies as a whole caused by

pollution or global warming can also be reduced by expanding this approach through the consideration of externalities (*Berry 2011; European Commission 2010; United Nations 2008*).

SPP can also be a major driver for innovation and help stimulate environmentally and socially conscious markets, particularly in sectors where public purchasers represent a large share of the market. Sectors which are likely to have the most impact include construction, health services, public transport, or information technologies. For example, SPP can drive markets to shift to cleaner technologies resulting in the generation of income and improved competitiveness of suppliers nationally or globally. Purchasing information technologies that are accessible for persons with disabilities SPP can serve as a model for other consumers and can help create a level playing field and economies of scale. The promotion of small and medium-sized companies and supplier diversity can result in increased access to the market (Berry 2011; European Commission 2010; United Nations 2008).

Indirect Benefits

Public demand for more sustainable produced goods and services can also have desirable indirect effects, such as raising consumer awareness about the environmental and social implications associated with different types of purchases. This awareness leads to socially responsible consumerism which creates demand for sustainable consumption and production patterns. Governments can demonstrate responsible governance, mitigate risks and promote behavioral change by setting an example through the establishment of SPP programs. The implementation of a sustainable procurement policy is a very effective way to demonstrate an authority's commitment to sustainability as a whole. These policies can also help improve public image and legitimacy (United Nations 2008; ICLEI 2007).

Potential benefits of Sustainable Public Procurement

Potential benefits of Sustainable Public Procurement	
Potential environmental benefits	
Contributing to meeting environmental challenges	Response to climate change, soil degradation, biodiversity loss, access to fresh water which includes reducing use, reusing, and recycling and ultimately reducing the amount of waste going to landfill.
Contributing to achieving binding targets	Reduction of greenhouse gas emissions, energy efficiency, national environmental objectives.
Local environment	Providing non-toxic cleaning products, creating healthier conditions for school children or using low-emission buses which improve local air quality
Potential social benefits	
Improved compliance with social and labor law	Compliance with provisions of the basic ILO Conventions which ban forced labor and child labor, establish the right to freedom of association and collective bargaining, and non-discrimination in terms of employment and occupation
Improved living conditions	Promotion of voluntary social standards such as Fair Trade which help reduce poverty
Improved social justice	Integration of people with disabilities or improved gender and ethnic equity
Potential economic benefits	
Financial savings	Reduced total cost for purchase, use, maintenance and disposal by using WLC Recognize upfront costs for sustainable products can be lower due to sustainable production processes Cost for societies caused by pollution, global warming, etc. can be reduced
Driving markets to more innovative solutions	Drive markets to shift more rapidly to cleaner technologies resulting in the

	<p>generation of income, improved competitiveness of suppliers, and ultimately lower cost due to economies of scale</p> <p>Expand markets that support achievement of social objectives and serve as a model by offering standards and information</p>
Increased access to markets	Promotion of small and medium-sized companies and supplier diversity
<p>Indirect benefits</p>	
Raising consumer awareness	<p>Raise consumer awareness about the environment and social implications of procurement</p> <p>Promote sustainable consumption and production patterns</p>
Demonstrating responsible governance	Respond to the growing public demand for governments to be environmentally and socially accountable in their actions, mitigate risks, and promote behavioral change
Improving public image and legitimacy	<p>Combine sustainable growth with reduced environmental impact and improved living conditions</p> <p>The public sector responds to its moral and political responsibilities</p>

2.22 Barriers to Sustainable Public Procurement

General barriers

Despite the benefits that SPP provides, several potential obstacles or barriers that sustainable public procurement practices. These barriers have been analyzed in a number of studies mainly focusing on the European experience (European Commission 2007; AEA Group 2010; Walker & Brammer 2007; Kahlenborn et al. 2011; United Nations 2008) and are identified as follows.

Economic

SPP is often perceived as more costly which leads to pressure to buy the cheapest goods and services. Higher initial investments for sustainable products, tight budgets, and inflexible budget systems and accounting practices often pose an additional financial burden. There is also insufficient information on whole life cost of products and the relative cost of environmental friendly products and services.

Political

There is often a low awareness of the benefits of sustainable products and services which causes lack of political commitment. Conflicting priorities can result in a lack of alignment of SPP policies with national development objectives or procuring entities' organizational goals

Legal framework

Interpretation of public procurement legislation is not always straightforward and procurement officials do not necessarily infer that the most economically advantageous tender should be the one with the lowest whole life cost. Developing countries may need to modify their legislation to be able to incorporate sustainability criteria. Also, the legality of national legal provisions on SPP may be challenged under international, regional or bilateral trade agreements if considered discriminatory (McCrudden 2004; Mosters 2010).

Cognitive

In general, there is a lack of competence in sustainability matters and in establishing sustainability criteria. There is a further lack of practical tools and information, and training. For many public procurers, including environmental and social issues in their purchasing decisions is a new concept. Many public procurement professionals are unfamiliar with SD principles such as whole life costing and calculating externalities (cost caused to the society) and they lack the legal knowledge on how to incorporate social and environmental criteria into tender specifications. A devolved or decentralized purchasing structure makes it even more difficult to manage SPP across the board in all product areas.

Regulatory policies

There is discussion whether GPP, or SPP, is a cost-efficient policy tool and whether it affects competition. This is compared to the use of economic policy tools that permanently change framework conditions such as taxes, subsidies, fees or emission permits (Brännlund *et al* n.d.). Some critics argue that the consideration of environmental and social criteria is incompatible with the general principle of using only award criteria that are relevant to the procurement decision. In Germany for example, several business associations and the liberal party opposed the integration of environmental and social criteria into the public procurement regime based on a number of concerns. These concerns include the notion that SPP would reduce competition, result in higher public expenditure, could be subject to misuse and increased corruption, and it could increase the administrative burden in particular for small and medium enterprises (Isenheim 2010).

Selection of Contractors

There are three main procedures to select the contractors for a tender: the public tender procedure, limited submission and the negotiated tender procedure.

❖ Public tendering

A principal can decide to announce his tender publicly, for instance through the website: www.aanbestedingskalender.nl or in the newspaper CoBouw. All contractors who are interested in the construction project can put in their offers, based on the project specifications (Pries, Keizer *et al.* 2006). From first announcement, the contractors have up to 52 days to put in their proposals (Kenniscentrum Europa Decentraal 2008). The principal chooses one of the available proposals and awards the contract to one of the contractors.

This procedure can be carried out in a traditional way, where the principal specifies the projects' specifications into detail and awards the contract on lowest price only, or in a more innovative way, where the projects' specifications have a more functional character and the awarding of the contract is more value based.

Limited submission

This procedure is being carried out in two stages. First the upcoming tender is announced. Within 37 days from publication, all contractors can put in a request to tender (Kenniscentrum Europa Decentraal 2008). In the second stage, the principal will select up to 6 contractors, and invite them to bid. After which the invited parties have 40 days to put in their offers. The best proposal is chosen amongst these offers (Pries, Keizer *et al.* 2006). The awarding of the contract can again be carried out in a traditional way (with lowest price tendering) or in a more innovative way (with value based tendering).

❖ **Negotiated tender**

When the principal chooses to put out a negotiated tender (in Dutch: onderhandse aanbesteding) a limited number of contractors are invited to put in their offers. A minimum of two and a maximum of 6 contractors are invited (Kenniscentrum Europa Decentraal 2008). The principal discusses the prerequisites of the contract with the contractors involved. The awarding of the contract can be carried out by using the two assessment methods mentioned above (lowest price and value based awarding).

Awarding the contract

There are two main assessment methods to award a contract. Project awarding on lowest price is the more basic of the two. A more innovative approach is used when the Economic Most Advantageous Proposal is sought. These methods will be described below.

❖ **Lowest price**

When one talks of traditional procurement, awarding on lowest price is meant. This is the most basic of all awarding methods. The principal describes the program of requirements, upon which the contractors base their price calculations for the project. These prices are all submitted in closed envelopes on one specific day.

The principal opens these envelopes and announces the prices. The project is awarded to the bid with the lowest price. This method is best used for projects that are described with a very detailed program of requirements or for a highly standardized project.

❖ **Economic Most Advantageous Proposal**

When the Economic Most Advantageous Proposal (in Dutch: Economisch Meest Voordelige Inschrijving) is sought, an assessment is being carried out in which both the price of a project

proposal and the proposed quality (or value) play an important role. The objective of this assessment is to find that proposal which offers the best value for money. This means that the principal doesn't necessarily look at the lowest price of the bids only. For the assessment of the benefits a set of predefined value-criteria is used, like level of innovation, sustainability, esthetics, life-cycle costs, safety and risk management (Crucq and Schillemans 2006). The

EMAP awarding process is suitable for projects which allow a more functionally specified program of requirements. The level of detail is lower than a traditionally specified program of requirements. This means that the contractors are given more possibilities for innovative ideas.

For the actual assessment of the project proposals, several methods can be used. A system of points can be used to indicate the EMAP.

The principal pre-defines a maximum amount of points that can be awarded to a specific value-criterion. This maximum is granted to the criterion on importance. Criteria which are thought of to be more important are granted a higher maximum score. The price is also translated into points; a lower price will get higher points. The principal evaluates every proposal and awards points to specific parts of the proposal. All points are added up and the proposal with the highest score is the EMAP (Jansen, A., Kolkman et al. 2007).

It is also possible to translate all quality aspects into money. These translated prices are subtracted from or added to the actual proposed price. When a criterion is thought to have a negative impact on the project, the translated price is added to the total. Positive criteria are subtracted. The bid with the lowest total price will be the EMAP. The last assessment method determines the ratio between value and price. The value criteria are again translated into points, as described for the first assessment method. This total of points is then divided by the proposed price for the project. The bid which generates the highest value/price ratio will be the EMAP.

Barriers to SPP in developing countries

There are no specific research results available on obstacles or barriers to implementing SPP in developing countries. To shed some light on this important issue, the barriers to SPP in developing countries are analyzed following an approach developed by the European research project RELIEF. The analysis includes the compilation of a list of potential barriers, identification of actors, development of a structured questionnaire, assessment of barriers through structured interviews, and analysis and strategy development (Barth et al. 2005)

List of potential barriers.

A list of potential barriers was compiled by using the general barriers identified above and by incorporating some issues considered to play a role in developing countries such as the potential impact of donor guidelines, lack of capacity, market readiness, and the negative impact on small and medium-sized local companies.

List of potential barriers to implementing SPP principles in developing countries

Legal framework does not allow or encourage SPP	Lack of knowledge related to environmental and social policies
Donor Guidelines do not allow or encourage SPP	Lack of monitoring tools
Lack of capacity	Market is not prepared to deliver sustainable products and services
Lack of guidance material and practical tools	- Negative impacts on small and medium sized local companies.
SPP is expected to increase the cost of public procurement	

2.23 Change Management

Sustainability and capacity development are closely linked to change management. The transformation of a traditional procurement system to a sustainable one involves transforming attitudes, conditions, and resources at the three levels of the enabling environment, the organization and the individual. Failure to recognize change management models and approaches can be one of the biggest impediments to the successful implementation of a procurement transformation. Change typically fails because there is a lack of ownership and commitment, poor communication of the change initiative, lack of strategic alignment to the change initiative, no sense of urgency, obstacles to change, failure to create quick wins, lack of stakeholder engagement, lack of project management skills, lack of follow through, and budget limitations (OECD 2011b).

It is also important to understand the environment and to consider the organization's readiness to change. Resistance to change can block capacity development initiatives. In order for an organization to welcome change, the organization will need to manage the change. Change management requires good communication skills, flexibility, responsiveness, strategic direction and incentives to keep employees motivated and productive (Pearson 2011).

The awareness of change management timing differs strongly along hierarchical levels. Lower management levels and the work force should be informed and engaged throughout the change management process. Transformational leadership skills are important to ensure a top down and bottom up approach (Capgemini 2010).

The following figure presents the ten pain points to ensure a successful change management process. The pain points are to analyze and understand the situation and the environment, ensure direction and alignment, develop structures and monitoring, ensure mobilization and commitment,

design organization and processes, mitigate conflicts and barriers, demonstrate leadership, enhance culture, target human resource development, and identify and anchor success (Capgemini 2010).

2.24 Good Practices: The European experience

The **European Union Green Purchasing Programme (GPP)** has triggered national green and sustainable procurement programs in almost all EU member states and has resulted in numerous initiatives facilitating the integration of sustainability criteria in public procuring practices. This chapter identifies good practices which shall be understood as methods and techniques with results superior to those achieved by other means.

2.25 The EU Green Purchasing Programme (GPP)

Sustainable Development is recognized as an overarching goal in the EU, since its inclusion in the EU Treaty Principles in 1997. At Lisbon in 2000, the EU stated the objective to become “the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion” (European Commission 2004, 7). The **EU Sustainable Development Strategy** was adopted in 2001. Shortly thereafter, the environmental dimension was added reflecting the aim to promote economic growth and social cohesion while paying due regard to environmental protection. **The Sixth Environment Action Programme** in 2002 identified four priority areas where action is urgently needed. These priority areas are climate change, nature and biodiversity, resource management, and environment and health (European Commission 2004).

The EU set out the possibilities to integrate sustainability considerations into public procurement procedures. The EU’s decision was guided by the understanding that sustainable development

cannot be achieved if there is no integration of sustainability considerations into all other policy areas. The EU Procurement Directives, 2004/18 Public 12 State of play in SPP in industrialized countries.

Sector Procurement Directive and 2004/17 Utility Sectors Procurement Directive, open the possibility to consider social and/or environmental issues during the procurement process. The directives allow for sustainable procurement initiatives while also reinforcing the objective to obtain best value for money through a transparent and fair competitive process in line with the rules of the European Single Market. Best value for money means to get the best deal within the parameters set and this can include environmental and social considerations. Acting fairly requires following the procurement laws as well as ensuring transparency and equal opportunities for bidders to compete for the contract (European Commission 2004; European Commission 2007a; European Commission 2010). The adoption of EU regulations into national procurement legislation allows member states to have a legal basis for including environmental considerations in technical specifications, selection and award criteria, and contract performance clauses. Member states also have a legal basis for taking account of social considerations provided they are linked to the subject-matter of the contract and the principles of value for money and equal access for all EU suppliers are observed.

In 2008, the European Commission enhanced its GPP strategy by defining common GPP product criteria. The product criteria are comprised of minimum core criteria and more demanding comprehensive criteria. The indicative target was for the member states to achieve a 50% level of compliance with endorsed common core EU GPP criteria for ten priority product/service groups by 2010 (AEA 2010; European Commission 2012b). The concept relies on setting good performance environmental criteria for products and services and then utilizing these during public procurement

in Europe. A *GPP toolkit* supports the uptake of the GPP policy. As of 2010, criteria for the 19 product groups noted in the table below were identified. More detailed information is provided in Annexure 2.

EU GPP Product Groups (European Commission 2012a)

EU GPP Product Groups	
❖ Copying and graphic paper	❖ Windows, glazed doors and skylights
❖ Cleaning products and services	❖ Thermal insulation
❖ Office IT equipment	❖ Hard floor-coverings
❖ Construction	❖ Wall panels
❖ Transport	❖ Combine heat and power
❖ Furniture	❖ Road construction and traffic signs
❖ Electricity	❖ Street lighting and traffic signals
❖ Food and catering services	❖ Mobile phones
❖ Textiles	❖ Indoor lighting
❖ Gardening products and services	

2.26 The Approach to SPP

The Approach to SPP is “a methodology with the goal to encourage public authorities to move towards more sustainable patterns in public procurement” (UNEP n.d.,6). The approach is guided by the following main principles.

- ❖ Good procurement is sustainable procurement: This is the basic principle, which underlies all the other principles and contains the core message that good procurement must take in consideration the three pillars of sustainable development which are the social, the environmental and the economic pillars.

- ❖ Leadership: Champions, such as organizations and senior management, can demonstrate leadership by sharing best practices and encouraging others.
- ❖ Policy through procurement: SPP can contribute to the delivery of a wide range of government and organizational objectives.
- ❖ Enabling delivery: SPP requires the communication of a consistent message designed for the needs of various internal and external audiences. SPP should be supported by clear lines of responsibility, with incentives and penalties for delivery.
- ❖ Implementing: Implementation should be based on life cycle approach and on continuous improvement. Implementation should be supported by the principles of procurement and it should use a risk-based approach, demonstrate immediate success through quick-wins and ideally SPP should be integrated into organizational or environmental management systems.
- ❖ Monitoring results and outcomes: Measuring improved environmental, economic and social performance (UNEP n.d.).

The methodology follows a step-by-step approach, which recognizes that countries have different legal procurement frameworks, different needs, different ambitions and different tools at their disposal that should be considered in defining the country strategy (UNEP n.d.).

2.27 Environmental Potential of Green Purchasing

Through the RELIEF-project, for which the objective was to assess the potential environmental benefits of green public procurement scientifically, it has been possible to estimate the benefits that could be generated vis-à-vis green public purchasing²¹. The quantification of possible

environmental benefits is an important aspect facilitating for the political decisions in favour of green purchasing. In the project report (Erdmenger, 2002), listed examples include:

- ❖ If all public authorities across Europe demanded green electricity, this would save the equivalent of 60 million tonnes of CO₂, corresponding to 18 % of the EU's greenhouse gas reduction commitment under (KP)Kyoto Protocol.
- ❖ Almost the same result could be achieved if authorities also opted for buildings of high environmental quality.
- ❖ If public authorities in Europe required more energy-efficient computers, thereby influencing the market to move in the same direction, the result would be a saving of 830,000 tonnes of CO₂.

2.28 Green Purchasing; a “Win-Win” Situation

The growing demand and need for sustainable strategies at different levels in the society (corporate, institutional, municipal, individual) promoting efficient use of resources and minimizing total waste volumes have been trickling down since the 1980's and the birth of the concept of sustainable development together with an increased interest in global resource flows as the main cause of environmental problems. The safeguarding of ecological values is seen as a benefit to the global society by slowing down environmental problems such as the human-made greenhouse effect (inducing climate change), eutrophication of waters, production and use of toxic substances, acidification impacts on forests, lakes, watercourses and groundwater, and noise pollution and summer smog (Erdmenger, 2003).

If the reduction of such external, or environmental costs, is coupled with economic savings, i.e. when environmentally sound practices pay off in both ends, often referred to as a “win-win”²²

situation, environmental or sustainability policies and strategies are often accepted by a wider range of stakeholders, which most likely affect the implementation potential.

This might partly explain the considerable attention given to the field of green purchasing during the last decade.

2.29 From Re-active to Pro-active Thinking

It has also been pointed out (Erdmenger, 2003; Hydén, 2004) that sustainability will not likely develop as the result of traditional environmental policy instruments based on “command-and-control”, which are lacking real incentives for improvement. Instead, they should be based on a “demand-and development” perspective; policies that support and create incentives for innovation and self-regulation in order to spur a continuous improvement of the environmental performance of producers.

The latter is thus seeking to avoid re-active thinking, i.e. to develop a new measure each time a new environmental problem arise, and instead seeking to foster pro-active strategies based on preventive measures so as to avoid environmental problems in the first place. Pro-active thinking and self-regulation is not necessarily the result from policies based on a “topdown” perspective. It might also be generated “bottom-up” through advanced practice and what Gillberg (1999) refers to as “normative action”. The latter can be described as the result of advanced practices in a specific context that influences the actions (or practices) somewhere else, through providing supporting structures, incentives and challenges towards change.

An advanced level of GPP practice might thus influence suppliers and companies towards environmentally sound practices, or performance, through normative action.

However, in pursue of a sustainable development, technological advances through innovation, economic market-based incentives, and political and administrative regulation (laws and policies), are not the only prerequisites. Sustainability requires different level of changes (Blassingame, 1998). First, on the physical level, processes can be improved so as to reduce pollution and increase the efficiency of resource-use, using technology that allows for this. Second, values and awareness must change too. This is however a much deeper level of change and harder to achieve. The second level of change includes the above mentioned systemic change in thinking. This involves an increase in the level of environmental knowledge both at the individual and institutional/organizational level.

Having the “right” knowledge - the idea is that we are to change our purchasing preferences towards green products so as to influence the patterns of production and achieve environmental benefits. This requires another, but no less important condition, namely that producers and suppliers provide purchasers with adequate information. Providing the information on the products’ environmental characteristics is still not mandatory, which is reason why voluntary environmental labels or product declarations have been developed. These kinds of instruments, or voluntary measures, are usually referred to as “soft” or “informative” instruments (Klintman & Boström, 2004). These instruments are partly used in GPP, but not for all products and production methods on the market. Neither is their importance widely discussed. Hence, there is a need for mechanisms to provide the right environmental information to the customers or purchasers.

2.30 Good, Better, Best; From Best Practice towards Best Performance

A concept which is closely linked to green public procurement is Integrated Product Policy (IPP). In 2001 the European Commission launched a “Green Book” on IPP aiming at a continuous

development of green products through the assessment of a life-cycle approach. Part of the objectives of the IPP is to support consumers and the public sector with tools to foster the development of green products in the market through their purchasing decisions (Miljöstyvningsrådet, 2004). The latest development with respect to the IPP is the Environmental Technology Action Plan (ETAP) which is a framework strategy that responds to the aims of the Göteborg and Lisbon strategies by synthesizing various policy initiatives for a sustainable development. The aim of ETAP is to create policies that generate incentives and supporting structures for innovation and development of eco-efficient technologies, leaving for industries and corporations to develop the specific techniques and measures for achieving certain targets.

A new strategy – Best Environmental Performance (BEP) – is being developed in order to further strengthen the integration of sustainability issues into all policy areas of the EU.

BEP would boost innovation by constituting legally binding targets. Using long-term legally binding environmental performance targets, such as resource use targets, would spur necessary changes in consumption patterns.

The underlying idea is to shift from the traditional “command-and-control” perspective towards strategies to support voluntary action within the industry (European Commission, 2004b). Best environmental performance is thus a less static concept with a more progressive perspective on what constitutes the best environmental solution at any given moment. Traditional concepts and methods such as Best Available Technology (BAT) and Best Environmental Practice, are concepts oriented towards already existing technologies and methods, and are thus less innovative.

2.31 Green Public Procurement on the International Agenda

The UNCED-Conference in Rio in 1992 and the emergence of sustainable development as a concept can be seen as a starting point for a series of actions taking place within a multitude of areas, involving different actors, with the objective of implementing the principles of sustainable development. One of these fields is green purchasing; an issue that has gained widespread recognition during the last decade. Here, some relevant steps of that process are listed in chronological order.

1992 World Business Council for Sustainable Development (WBCSD); a sustainability initiative created by the business sector as a response to the Agenda 21 document in Rio.

1992 ICLEI – International Council for Local Environmental Initiatives – is established; having proposed Local Agenda21 (LA21) to the UNCED conference in Rio, ICLEI today is leading inter-municipal clearinghouse on local sustainable development and LA21 issues.

Launched the “Adding value – Buying green: European Eco-Procurement Initiative”.

1996 OECD’s Programme on sustainable consumption and production

1997 The concept of sustainable development is included in the EC Treaty and accepted as an overarching goal of the EU.

1997 European Green Purchasing Network initiated

1999 (Feb) Eco Procura Europe99 – European Forum for economic and green purchasing and environmental management takes place

1999 (May) The 1997 Treaty of Amsterdam entered into force; environmental considerations have to be integrated into all policies of the European Community (in accordance with art. 6 of the treaty), the so-called “Cardiff process”

2000 The Lisbon strategy is adopted by the EU; the aim is to make EU the most competitive and dynamic knowledge-based economy in the world by 2010, capable of combining economic growth with social cohesion and environmental protection

2001 The EU Sustainable Development Strategy is adopted at the Göteborg European Council; green procurement is acknowledged as key in achieving the Lisbon Strategy

2001-2003 RELIEF, European research project on green procurement

2001 (Nov) EcoProcura roundtable, national green purchasing guidelines in Europe were presented and discussed as well as possible benefits and best approaches of the Common Guidelines.

2002 (May) OECD Council recommendation that member countries should take greater account of environmental considerations in public procurement of products and services so as to “improve the environmental performance of public procurement”.

2002 (Dec) The World Summit on Sustainable Development (Rio+10) is held in Johannesburg; in the Plan of Implementation (§18) authorities at all levels are encouraged to “promote public procurement policies that foster the development of environmentally sound goods and services”.

2003 (May) International Seminar on EU’s new public procurement directives (2004/18/EC and 2004/17/EC) that clarifies the possibilities of including environmental considerations in public Tenders.

2003-2006 ICLEI- project Local Environmental Management Systems and Procurement (LEAP) initiated, with the aim of developing tools for systematically implementing green procurement as part of an EMS and coordinating procurement in order to overcome market barriers.

2003 (Sep) EcoProcura Conference in Göteborg, provides the latest information on a variety of topics related to sustainable procurement practices from across Europe and aims at fostering an

exchange of practical experiences and coordinate future activities, results in Procura+Sustainable Procurement Campaign (ICLEI)

2004 (Oct) The First International Conference on green purchasing took place in Sendai, Japan, to share the latest experiences on green purchasing. Resulted in a Green Purchasing

Declaration that highlights the use of EMS and Eco-labels as effective tools, as well as the importance of public organizations to act as initiators and develop best practice models, which include “policies, strategies, regulatory frameworks, incentive plans and relevant education programmes to promote Green Purchasing” (GPN Japan, 2004). The International Green Purchasing Network (IGPN) was established.

2004 (Oct) “Eco-procurement and moving beyond”, a BIG-Net international expert seminar in France to gather the latest information on practical issues and exchange on current best Practice concerning sustainable procurement in European public authorities took place

Two weeks later, on the 29th of October, in its aim of taking on a more pro-active role the European Commission²⁵ launched the *Buying Green! A handbook on environmental public procurement* that explains in non-legal terms how public purchasers can do to integrate environmental considerations into their procurement activities. At a launch event in Brussels, the handbook as well as the political background was presented, followed the discussions on green public procurement with different stakeholders representing public sector authorities, industries, NGO’s, decision-makers, and various organisations.

The best practices from different countries were also presented on the potential of green Procurement for goods and services without compromising with economic concerns.

2.32 Empirical Literature

Mensah and Ameyaw (2005) carried out a research on the challenges of sustainable procurement in the Ghanaian construction industries. Many authors noted that few people in the procurement department understood sustainable procurement as the way that encompasses environment, economic and social aspects of sustainability. They discovered that the main concerns for sustainable procurement have not been harmonized into a policy for use in the Ghanaian construction industry. It was concluded that lack of understanding of the SP concept and the higher initial costs associated with SP were identified as the major challenges that face SP practice in the Ghanaian procurement landscape. It was recommended that educational institutions, non-governmental organizations and governmental oversight bodies have a significant role to play in regularly educating and creating intensive awareness among all stakeholders on issues concerning SP. With government's investment, the proper tools and techniques required must therefore be developed to support effective practice of SP.

Brammer and Walker (2007) researched on the sustainable procurement practice in the public sector in the UK. Financial constraints, the perception that sustainable products are expensive, lack of senior management support and the none availability of sustainable products were some of the limitations to sustainable procurement which were identified by the researcher. Brammer and Walker (2007) concurred with Mensah and Ameyaw (2005) on the high costs associated with sustainable products as one of the barriers. In their conclusion Brammer and Walker (2007) noted that both the cross-country variation in the sustainable procurement activities of organisations and the observation that legislative support for sustainable procurement is among the most frequently cited facilitators of sustainable procurement suggest that national and international policy

environments regarding sustainable procurement are a primary determinant of the extent to which organisations engage in sustainable procurement.

Brammer and Walker(2007) recommended that the governments needs to provide clear legislative and regulatory support for SP, and also to provide sufficient budgetary flexibility for organisations to make investments in SP that may be financially efficient only when viewed from a long-run perspective.

Boomsma (2009) researched on sustainable procurement in developing countries. The countries under study were Sierra Leone, Mali and South Africa. The research found that lack of technical and management capacity, cultural integration, funding for investment startups, early inclusion of small producers, transparency and equal distribution of power were some of the aspects cited as hindering sustainable procurement by the author. Boomsma (2009) concluded that sustainable sourcing needs multi stakeholder process, as well as the primary value chain actors, stakeholder researchers, government, support agencies, in order to be successfully implemented. The author further highlighted the need to create synergy among these stakeholders to manage conflicts and interests as to ensure that all actors gain. Boomsma (2009) recommended that the three aspects of sustainability (efficiency, high quality and social responsibility) need to be considered in the structure of an organization and its supply chain in order to add the highest possible value to the chain. The public sector, support agencies and donors should actively and responsibly support this process. In poorly integrated chains, a facilitator may be needed to coordinate and mediate the process towards a fair chain partnership.

Dolva (2008) made an assessment of Green Public Procurement in Norway and an analysis of perceived drivers and barriers for implementing more Green Public Procurement. The results revealed that 60% of all tender documents included some kind of environmental criteria but 1/3

were doubtful. This indicated that lack of knowledge, focus on economic considerations and product functionality, and work pressure were five main barriers preventing Green Public Procurement. Increased co-operation, increased focus from management, simplification of criteria and more available products with environmental labels were identified as drivers. The author recommended the labeling of products and making visible more environmental friendly alternatives available in trying to find a way to reach a better co-operation in the procurement process, supporting initiatives for Environmental Management Systems and standards, and striving to make the possibility to include Green Public Procurement as simple as possible.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter gives an insight into the different methods used in the study for the data collection. The methods are sampling procedure, selection of study organization and respondents, the sample size, the instrument for data collection and data collection procedure, data analysis, statistical package and analytical tools.

It also, describes how the research has been approached. According to Remenyi (1996: 25), it is important that any research undertaken either for a undergraduate degree or masters “requires that the methodology used be clearly spelt out, perhaps in a chapter of its own, so that the results of the research are convincing or at least credible”. Remenyi (1996) further states that the focus should be on a difficult problem and which would, when solved, add material value to the research topic. Remenyi (1996: 22) further states that the “three major philosophical questions” that should be addressed at the outset of the research. Why research is undertaken, what to research, and how to research. Chapters 1 and 2 addressed the why and what, and this chapter provides a detailed analysis of how the research was conducted. The research is focused on the sustainable procurement practices at Ghana Health Service.

The methods and approaches to the research design are discussed in the following section below:

3.2 The Research Design

Research design is not just a work plan but it is a tool that enables the researcher’s ensure that the evidence obtained answer the questions under study in a research, as unambiguously as possible (De Vaus, 2001). There are three main research approaches: qualitative, quantitative and mixed

approach that can be adopted for a study. The mixed approach which combines the two approaches was used.

Both structured and unstructured questionnaires, observations and in-depth interviews were used to collect primary data by adopting the survey approach in collecting data on the assessment of sustainable public procurement practices in Ghana Health Service.

For secondary data, annual reports, articles, textbooks and journals and procurement manuals were collected on public procurement. The data was analyzed using both qualitative and quantitative analysis.

Quantitative method, however, uses standardized instruments, so that the varying perspectives and experiences of people can fit a limited number of predetermined response categories, to which numbers, pie chart, bar chart are assigned and measured statistically. On the other hand, qualitative data are often expressed verbally in order to understand a social or human problem through pictures and words in a natural setting, (Cresswell, 1994). Therefore, both qualitative and quantitative research methods were used in this study.

The research work is a cross sectional dimension design and descriptive in nature.

3.3 Sampling Procedure and Technique

3.3.1 Study Organization/Target Population

A research population can be defined as the totality of a well-defined collection of individuals or objects that have a common, binding characteristics or traits. The population for this study comprised of all those who are involved in public procurement activities within Ghana Service Head Quarter, Accra. Respondents were made up of procurement, supply chain and other

management staff. The respondents were purposively selected; the selection of the organization was influenced by its accessibility to the researcher.

3.3.2 Sample Size

Selection of Sample Size

In conducting a research study, it is practically impossible, time-consuming and too expensive to test every individual in the entire population. Therefore smaller chunks of a unit sample are chosen to represent the relevant attributes of the whole of the units (Graziano & Raulin, 1997). The sample size was calculated with recourse to the deVaus proportion approach (DeVaus, 2002).

$$n = N$$

$$1 + N(e)^2$$

$$n = \text{Sample Size}$$

$$N = \text{Sample frame}$$

$$E = \text{Confidence Level}$$

Using the above formula, a convenient sample size of 30 respondents made up of procurement, warehousing and other management staff was randomly selected at Ghana Health Service Headquarters, Accra.

3.4 Sampling Technique

The researcher made use of non-probability sampling technique, this is convenience sampling method was employed in obtaining the respondents. The respondents were available and willing to provide the necessary information to various questions.

Data Collection Techniques

The data collection methods or techniques formed an important part of this research. According to Patton (2002) using more than one data collection instrument strengthens and gives credibility to the study. The use of more than one data collection instrument portrays a true picture of the case under study. In this regard, the researcher gathered the required data from two (2) different sources. This approach was used because it revealed issues that could not be raised in using only one data collection instrument. The study made use of primary and secondary data sources in order to gather relevant information for the study.

3.5 Primary Data

The main research instruments used were questionnaires, interviews, and field observations. This was done with the focus on the objectives set in the study. The primary data were collected from the selected respondents within procurement, stores and other administrative staff of the organization to solicit information on sustainable public procurement practices in Ghana Health Service Headquarters, Accra.

The analysis of the study was substantially based on this data.

3.6 Secondary Data Source

According to Wilson, (2006) defined secondary data as information that has been previously gathered for some purpose other than the current research work but on similar theme.

The secondary data of the study was source from books, internet, journals, and articles in newspapers and magazines etc.

3.7 Contact Methods

I personally administered Questionnaires to procurement, inventory control officers, warehousing and other management staff and face-face interview was carried out as well for the purpose of effective analysis and discussion on sustainable public procurement practices at Ghana Health Service Headquarter, Accra.

3.8 Data Analysis/Statistical Package And Analytical Tool.

In this study, both quantitative and qualitative methods were employed in the data analysis. The Statistical Package for Social Sciences (SPSS) and excel were used for data entry and analysis of the data collected. Data preparation was the initial step to convert raw data into structured format that was more appropriate for the analysis. Tasks in this stage included data editing, data coding and data entry, frequency distributions, percentages, and descriptive analysis of assessing the sustainable public procurement practices in Ghana Health Service.

Data collected were collated and analyzed using various quantitative statistical models such as tables, bar chart and pie chart to illustrate the results. The findings were critically examined to ensure consistency with the research objectives.

The questionnaires administered to procurement and management staffs were edited. Qualitative data from interviews and observation were also analyzed.

3.9 Ethical Considerations

Ethical issues are necessary when research is done through interaction with people, especially when conflicts of interest may occur (Babbie and Mouton, 2001).

In order to ease the relevant departmental official's minds and to ensure their participation in the study, this research study was carried out for only academic purposes and any information provided will be used confidentially.



CHAPTER FOUR

DATA ANALYSIS AND DESCRIPTION OF RESULTS

4.1 DATA FROM GHS (SSDM), ACCRA.

Respondents to the research study were randomly selected and twenty (20) questionnaire were administered to the staff of GHS (SSDM), but thirteen (13) of them were retrieved.

The purpose of the questionnaire was to found out the practice of sustainable procurement at Ghana Health Service (SSDM).

Demographic Characteristics

Table 1.1 Gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	11	84.6	84.6	84.6
Female	2	15.4	15.4	100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

The study revealed that out of 13 retrieved questionnaires at Ghana Health Service (SSDM).

The researcher realized that 11 of the respondents were males indicating 84.6% and two (2) female representing 15.4% that filled the questionnaires.

Table 1.2. Position of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Supply Manager	2	15.4	15.4	15.4
Senior Supply Officer	1	7.7	7.7	23.1
Administrative Manager	2	15.4	15.4	38.5
Procurement Manager	2	15.4	15.4	53.9
Supply Officer	3	23	23	76.9
Store Officer	1	7.7	7.7	84.6
Assistant Supply Officer	1	7.7	7.7	92.3
Principal Store Officer	1	7.7	7.7	100
Total	13	100.0	100.0	

Source: Field Data, 2014.

From the above table 2, researcher found out that the supply officers representing 23% of the respondents most in the answering the questionnaires.

Table 1.3. Age of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18 - 29 years	4	30.8	30.8	30.8
30 - 39 years	7	53.8	53.8	84.6
40 years and above	2	15.4	15.4	100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

From the table above, the ages of respondents from the retrieved questionnaire were as followed.

18-29 years (4) representing 30.8%, 30-39 years (7) representing 84.6% and 40 years and above (2) representing 15.4 of the respondents that filled the questionnaires.

Table 1.4 Work duration at Ghana Health Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Six years	4	30.8	30.8	30.8
	Ten years	1	7.7	7.7	38.5
	Five years	2	15.4	15.4	53.8
	Four years	4	30.8	30.8	84.6
	Three years	1	7.7	7.7	92.3
	Eight years	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Source: Researcher's field survey 2014.

2.26 The level of awareness of sustainable procurement practice in Ghana Health Service, Headquarters Accra?

Table 1.5 Are you aware of sustainable procurement practice at Ghana Health Service?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	1	7.7	7.7	7.7
No	12	92.3	92.3	100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

Based on the responses received from the respondents concerning the level of awareness of sustainable procurement practice in Ghana Health Service, Headquarters Accra?

One of the respondents says yes representing 7.7% and twelve (12) representing 92.3% of the respondents. This means that the majority of the staff are not aware of the practice of sustainable procurement at GHS (SSDM).

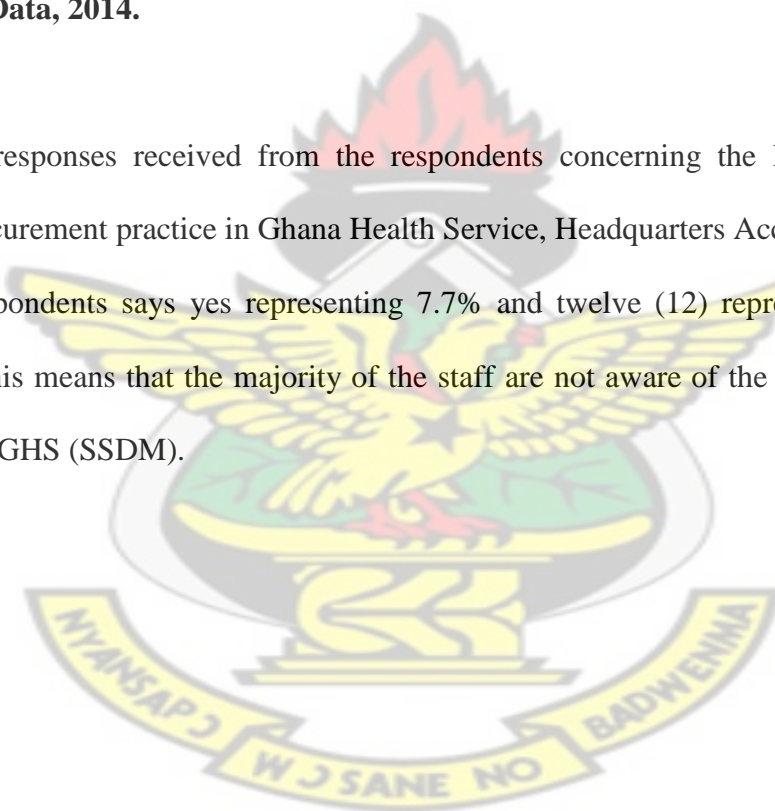
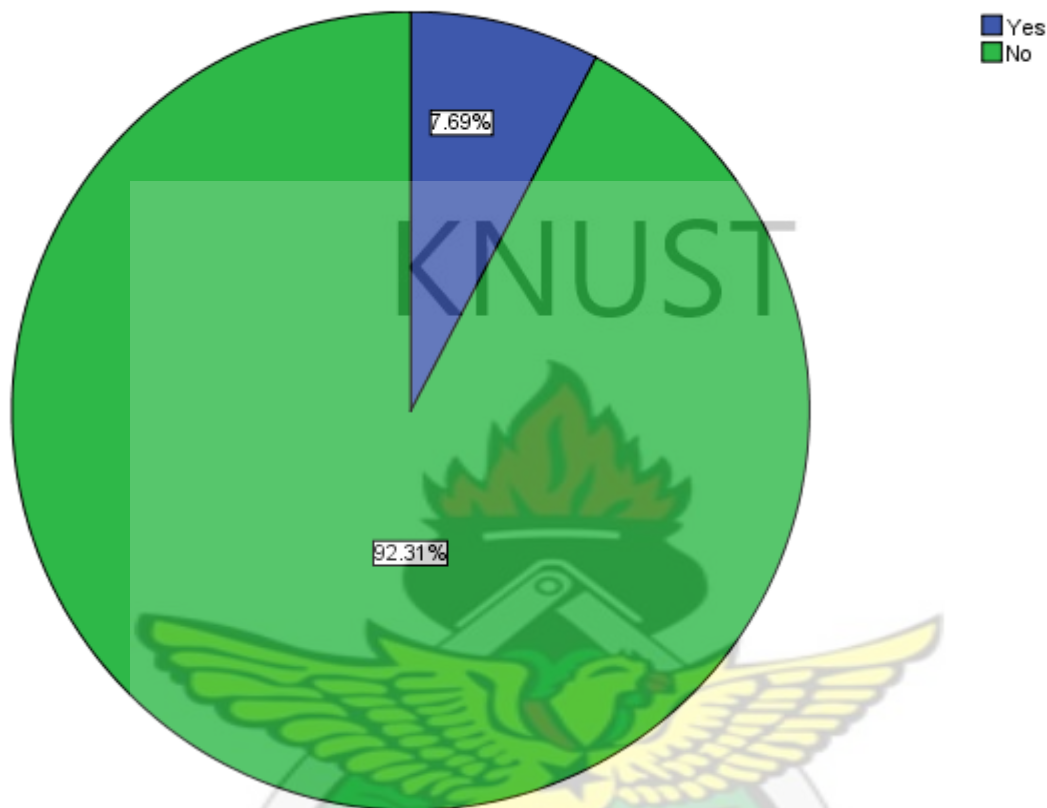


Figure1. Are you Aware of Sustainable Procurement Practice at the Ghana Health Service?



Source: Researcher's Field Work, 2014.

The researcher in this case wanted to find out the level of awareness of sustainable procurement practice in Ghana Health Service, Headquarters Accra? Twelve (12) out of the thirteen respondents representing 92.31% stated that there are not aware of the sustainable procurement in Ghana Health Service, Headquarters Accra.

2.27 What are the sustainability procurement practice considerations in defining contract requirements at Ghana Health Service (Headquarters, Accra)?

Table 1.6 In defining the requirements of a contract, what are some of the important sustainable considerations?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PESTEL	1	7.7	8.3	8.3
	Source of raw materials and disposal of obsolete materials	2	15.4	16.7	25.0
	Registration with Food and Drugs Authority and Ghana Standards Authority	2	15.4	16.7	41.7
	Environmental, economic and social issues concerning sustainability	7	53.8	58.3	100.0
	Total	12	92.3	100.0	
Missing System		1	7.7		
Total		13	100.0		

Source: Field Data, 2014.

From the above table the researcher realized that, in defining the requirements of a contract, environmental, economic and social issues which represent 53.8% should be the important sustainable considerations at Ghana Health Service (Headquarters, Accra) when defining contract requirements.

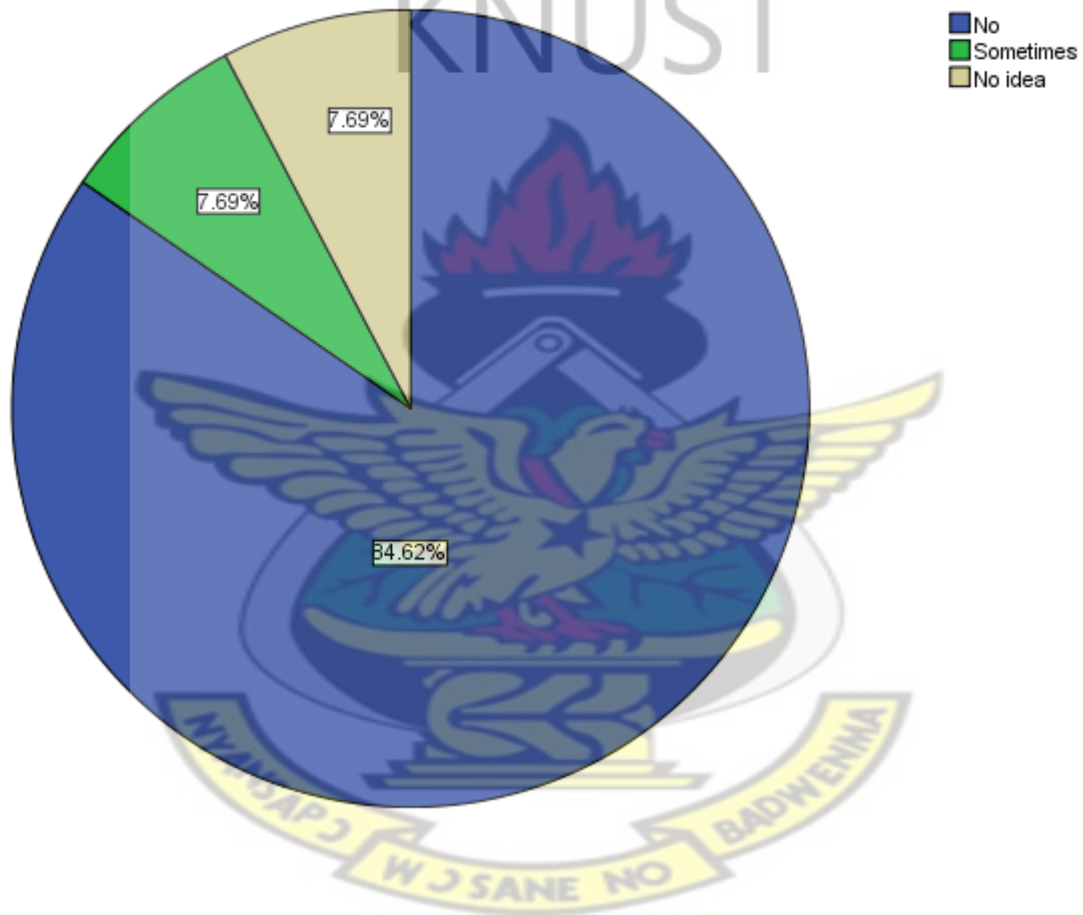
2.28 Does Ghana Health Service face some challenges in the implementation of sustainable procurement practice?

Table 1.7 Does your department face difficulties in the effective sustainable procurement practices?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	84.6	84.6	84.6
	Sometimes	1	7.7	7.7	92.3
	No idea	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Source: Field Data, 2014.

Figure2. Does your Department face Difficulties in the Effective Sustainable Procurement Practices?



Source: Researcher's Field Work, 2014

The respondents were asked about the challenges faced in the implementation of sustainable procurement practice at Ghana Health Service (SSDM). From the answered questionnaires, 11 of the respondents say 'NO' representing 84.6%, 1 respondent says sometimes representing 7.7% and 1 respondent also says no idea representing 7.7%. This simply means that majority of the respondents are of the view that the department does not faced with challenges of sustainable procurement practice because, they are not practicing sustainable procurement.

2.29 Is there a policy document in place to procure sustainably by considering the environment, social and economic factors at Ghana Health Service?

1.8 Does your department have a policy in place to ensure implementation of SPP practices

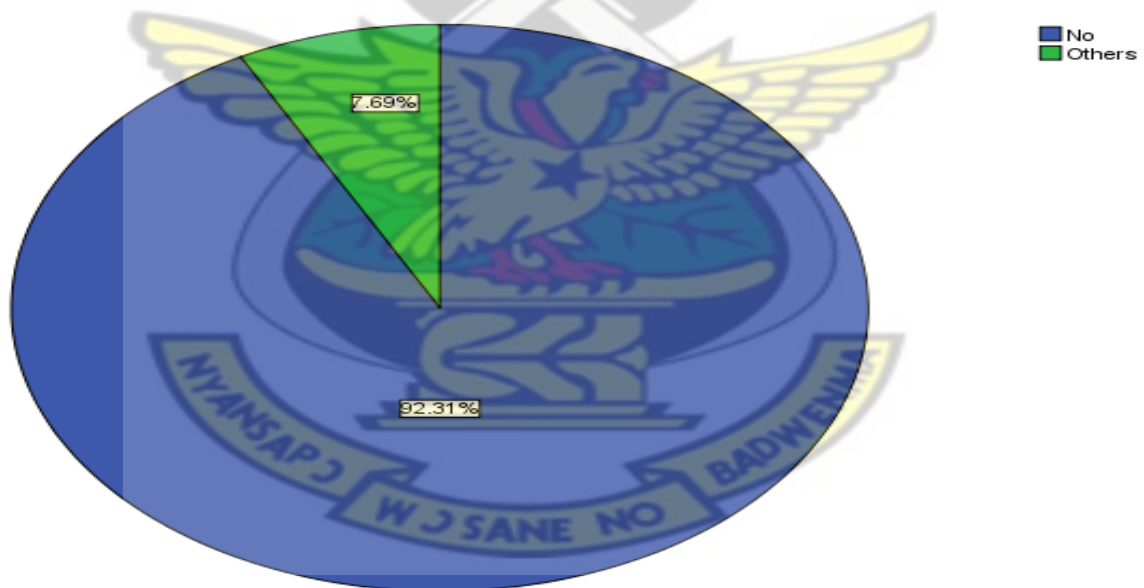
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	13	100	100	100.0
				100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

The respondents were asked if there is a policy document in place to procure sustainably by considering the environment, social and economic factors at Ghana Health Service.

From the answers questionnaires, 13 of the representing 100% says no, which means that Ghana Health Service(SSDM) does not have in place a policy document that governed sustainable procurement practice.

Figure 3 Does your Department have a Policy in place to ensure implementation of SPP Practices?



Source: Researcher's Field Work, 2014

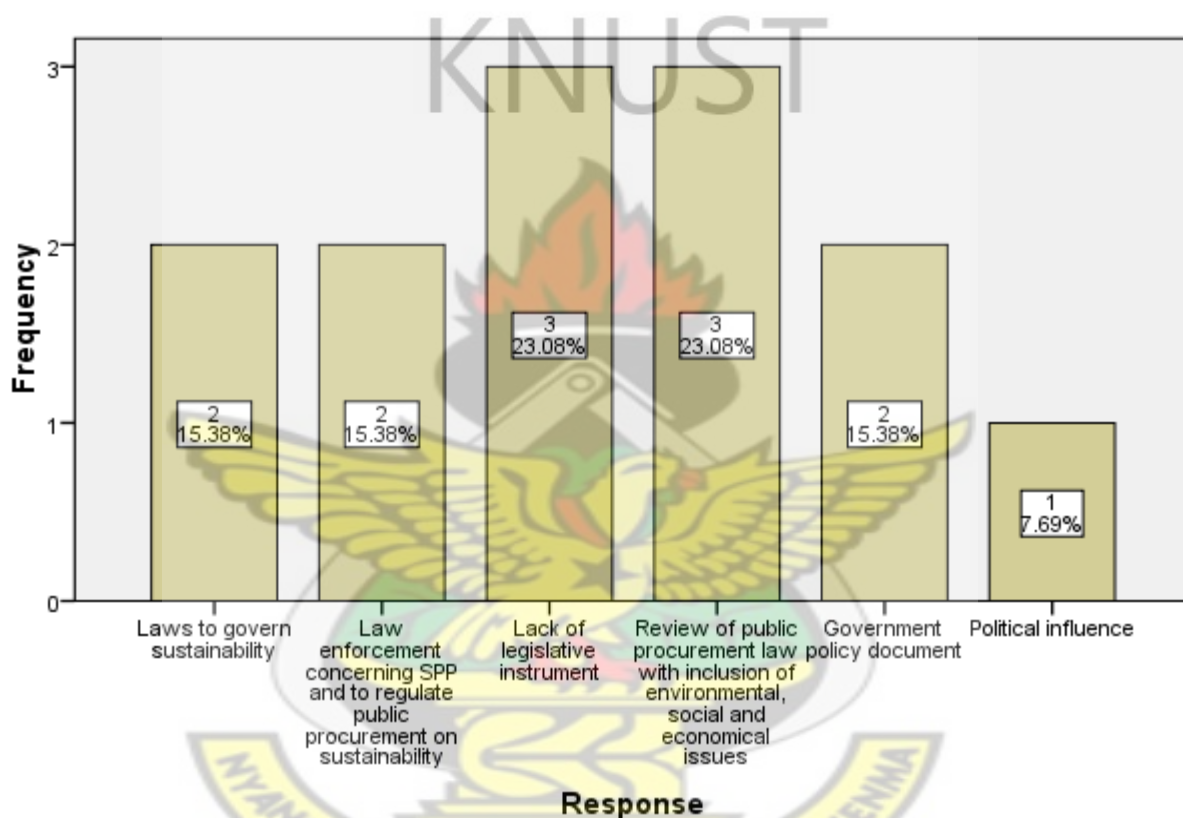
2.30 Do you think the success of SPP in Ghana Health Service depends on the commitment of individuals within the organizations? Or is there a "bigger" influence (state)

Table 1.9 Success of SPP in Ghana Health Service depends on the commitment of individuals within the organizations? Or is there a "bigger" influence.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Laws to govern sustainability	2	15.4	15.4	15.4
Law enforcement concerning SPP and to regulate public procurement on sustainability	2	15.4	15.4	30.8
Lack of legislative instrument	3	23.1	23.1	53.8
Review of public procurement law with inclusion of environmental, social and economic issues	3	23.1	23.1	76.9
Government policy document	2	15.4	15.4	92.3
Political influence	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

Figure 4 Do you think the Success of SPP in Ghana Health Service depends on the Commitment of Individuals within Organizations? Or Is there a “Bigger” Influence (State)?



Source: Researcher's Field Work, 2014

The findings from figure 4 depicts that success of SPP in Ghana Health Service depends on legislative instrument, Review of public procurement law with inclusion of environmental, social and economic issues.

Selection of suppliers, service providers and contractors

Table 1.10

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Registration of products with FDA and GSA	1	7.7	7.7	7.7
Past experience, capacity of suppliers and requirement needs	6	46.2	46.2	53.8
Experience, budget, accessibility and sustainability	3	23.1	23.1	76.9
No response	1	7.7	7.7	84.6
Most economically advantageous suppliers/contractors and follow EPA regulations	2	15.4	15.4	100.0
Total	13	100.0	100.0	

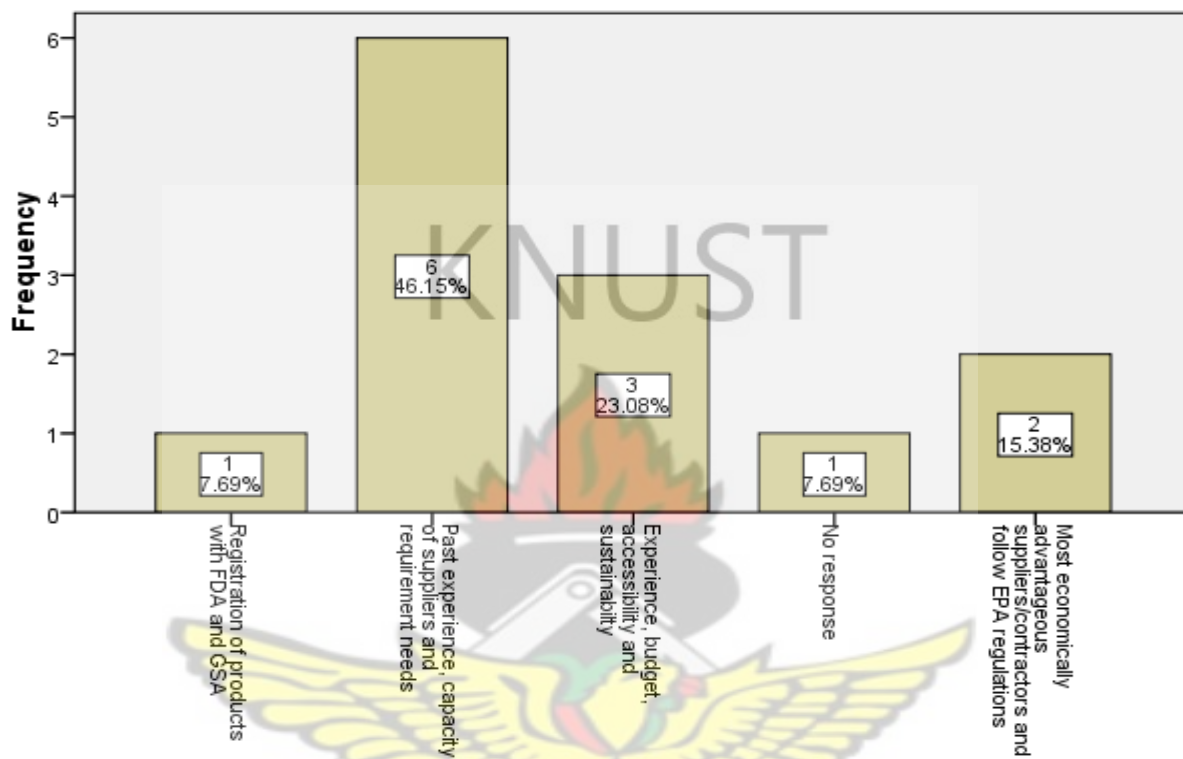
Source: Field Data, 2014.

The result in the table 1.10 reveals that in implementing Sustainable Public Procurement Process successfully, the following factors need to be considered when selecting suppliers, service providers and contractors?

- ❖ **Past experience,**
- ❖ **Capacity of supplier and**
- ❖ **Need requirements.**

Representing 46.15% of the respondent in the above table.

Figure 5 Selection of Suppliers, Service Providers and Contractors



Source: Researcher's Field Work, 2014.

4.8 Factors to consider before making a purchase decisions at the Ghana

Health Service. Table 1.11

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Budgetary considerations, supplier qualifications and consumer needs	11	84.6	84.6	84.6
Outside/in-house purchases, price and fund availability	1	7.7	7.7	92.3
Identification of commodity, procurement methods, ICT/NCT and national security/emergencies	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

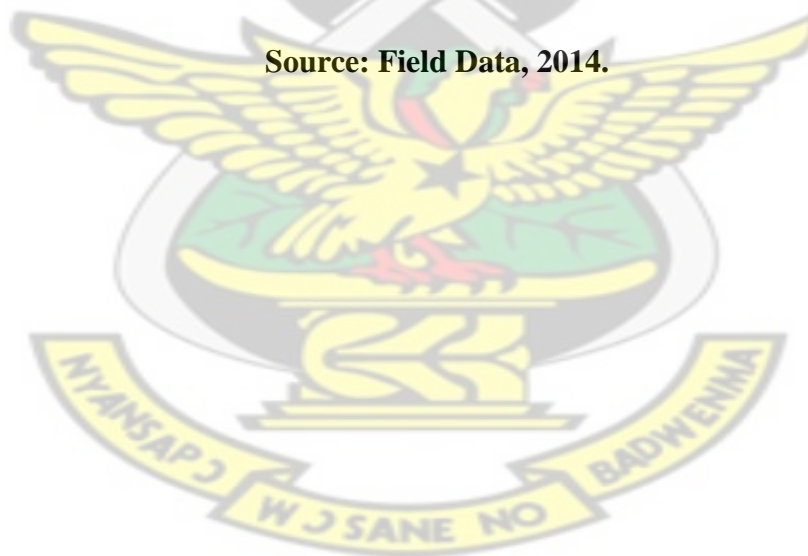
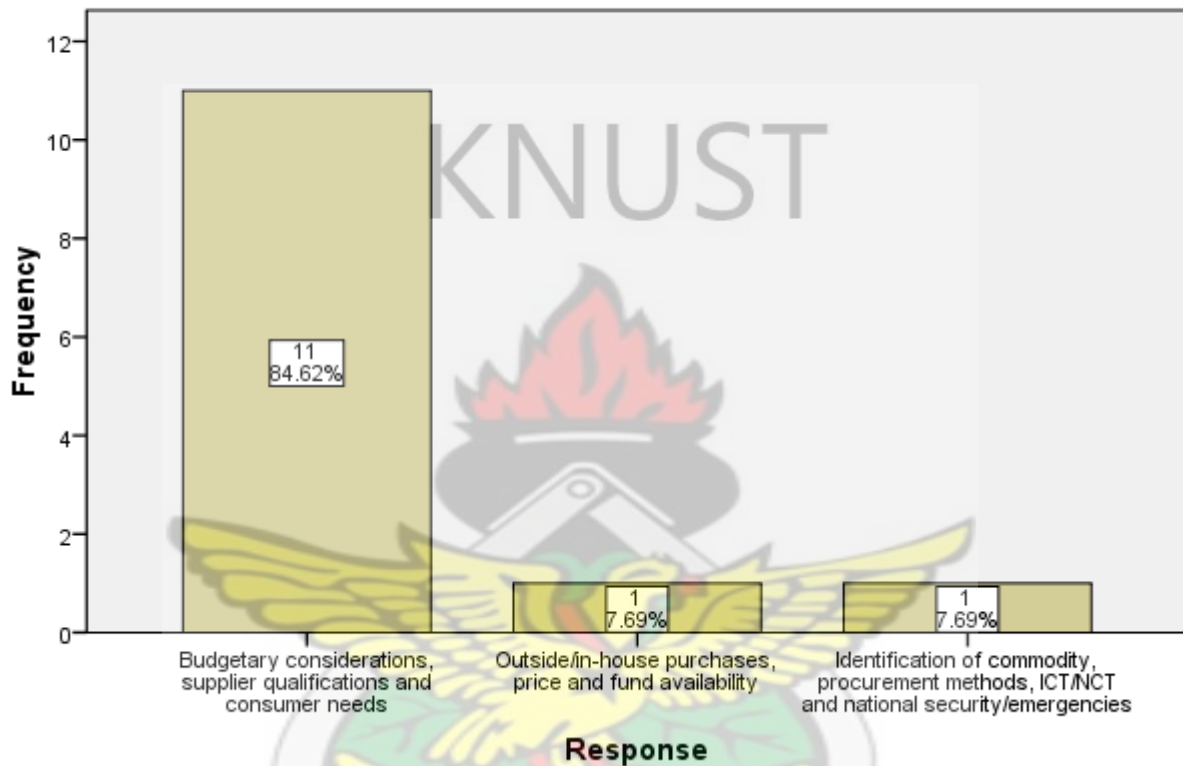


Figure 6 Factors to Consider before making a Purchase Decisions at the Ghana Health Service



Source: Researcher's Field Work, 2014

Also, the respondents were asked about the factors to consider before making a purchase decisions at the Ghana Health Service?

From the table 1.11 and figure 6 the identification of needs, budgetary considerations and supplier qualification are the major factors to consider before making purchasing decisions.

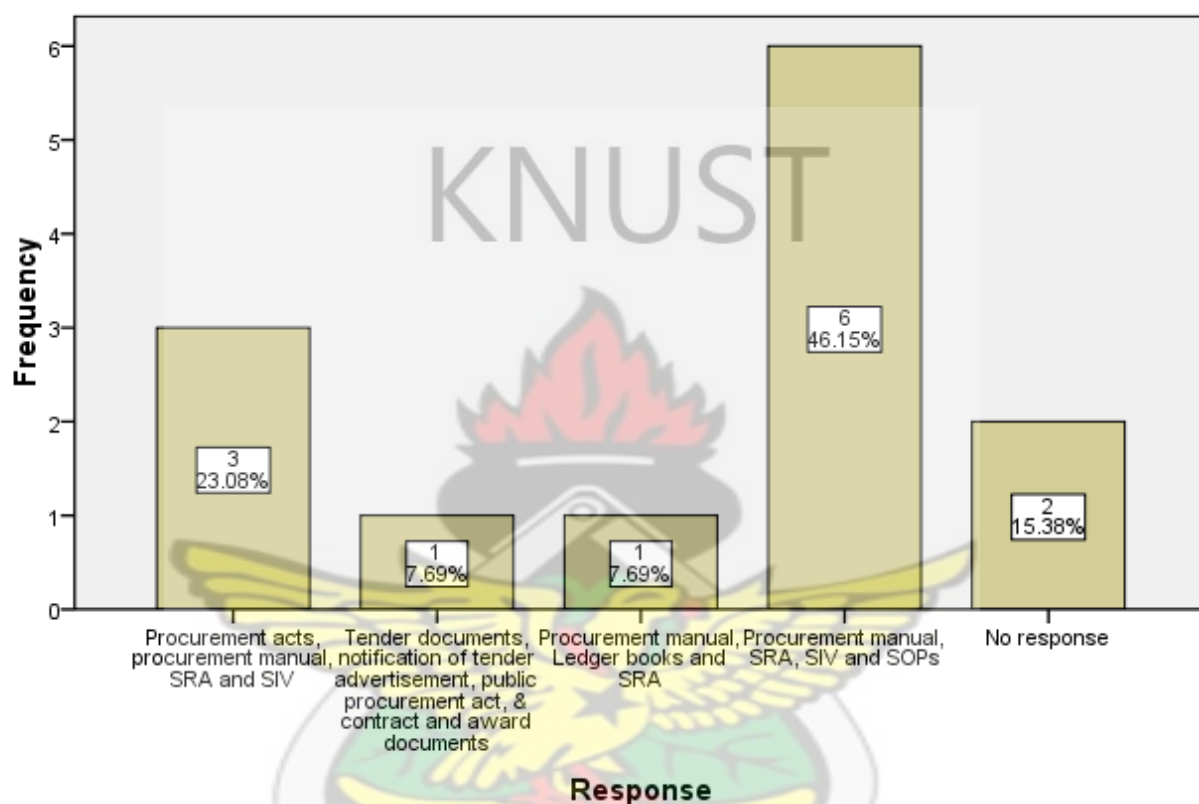
4.12 Types of documents used in procurement activities in Ghana Health Service.

Table 1.12

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Procurement acts, procurement manual, SRA and SIV	3	23.1	23.1	23.1
Tender documents, notification of tender advertisement, public procurement act, & contract and award documents	1	7.7	7.7	30.8
Procurement manual, Ledger books and SRA	1	7.7	7.7	38.5
Procurement manual, SRA, SIV and SOPs	6	46.2	46.2	84.6
No response	2	15.4	15.4	100.0
Total	13	100.0	100.0	

Source: Field Data, 2014.

Figure 7 Types of Documents used in Procurement activities in Ghana Health Service?



Source: Researcher's Field Work, 2014

From the above diagram, the researcher realized that 6 of the respondents which represented 84.6% which indicated Procurement manual, SRA, SIV and SOPs are the main types of documents used in procurement activities in Ghana Health Service.

4.13 Does your department have supplier's information files?

Table 1.13

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	13	100.0	100.0	100.0

Source: Field Data, 2014.

Figure 8 Does your department have Suppliers Information Files?



Source: Researcher's Field Work, 2014

The study found out that (as depicted in table above). This was corroborated with a strong agreement from 13 (100%) practitioners agreeing that Ghana Health Service (SSDM) department have in place supplier's information files.

4.14 Lowest evaluated price as main basis for the award of contract

Table 1.15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Simple project	12	92.3	92.3	92.3
	Complex project	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Source: Field Data, 2014.

From the above table, twelve (12) out of thirteen (13) respondents representing 92.3%, it was found out that, evaluation of tenders and award of contracts for health commodities and services at Ghana Health Service for simple and complex projects the lowest price as remain the basis for the award of contract.

4.15 Economical and advantageous tender as main principle for the award of contract.

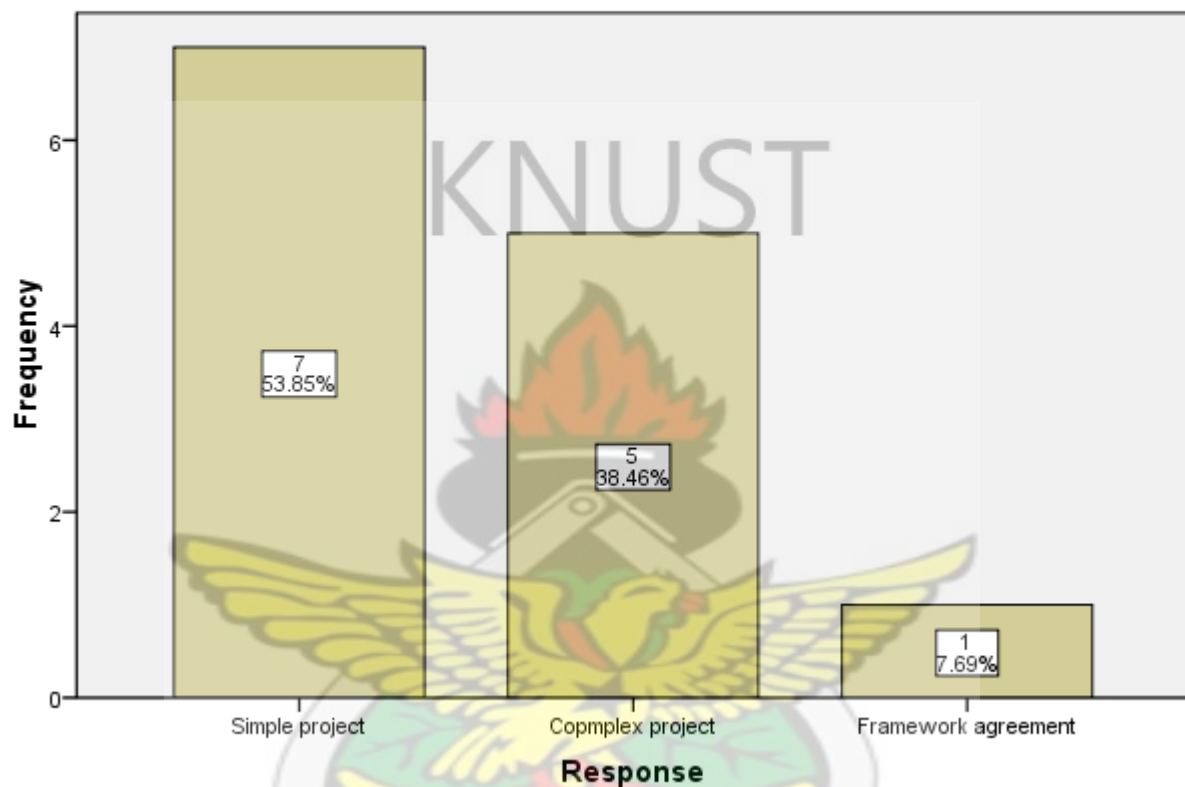
Table 1.16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Simple project	7	53.8	53.8	53.8
	Complex project	5	38.5	38.5	92.3
	Framework agreement	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Source: Field Data, 2014.

For the evaluation of tenders and award of contracts by considering economical and advantageous tenderer, from the above responses, seven (7) of the respondents representing 53.8 % are of the view that for simple project the most economic and advantageous tenderer criteria should be used in awarding contracts.

Figure 9 Economical and advantageous tender as main Principle for the Award of Contract



Source: Researcher's Field Work, 2014

4.16 The relevance potential barriers in implementing SPP.

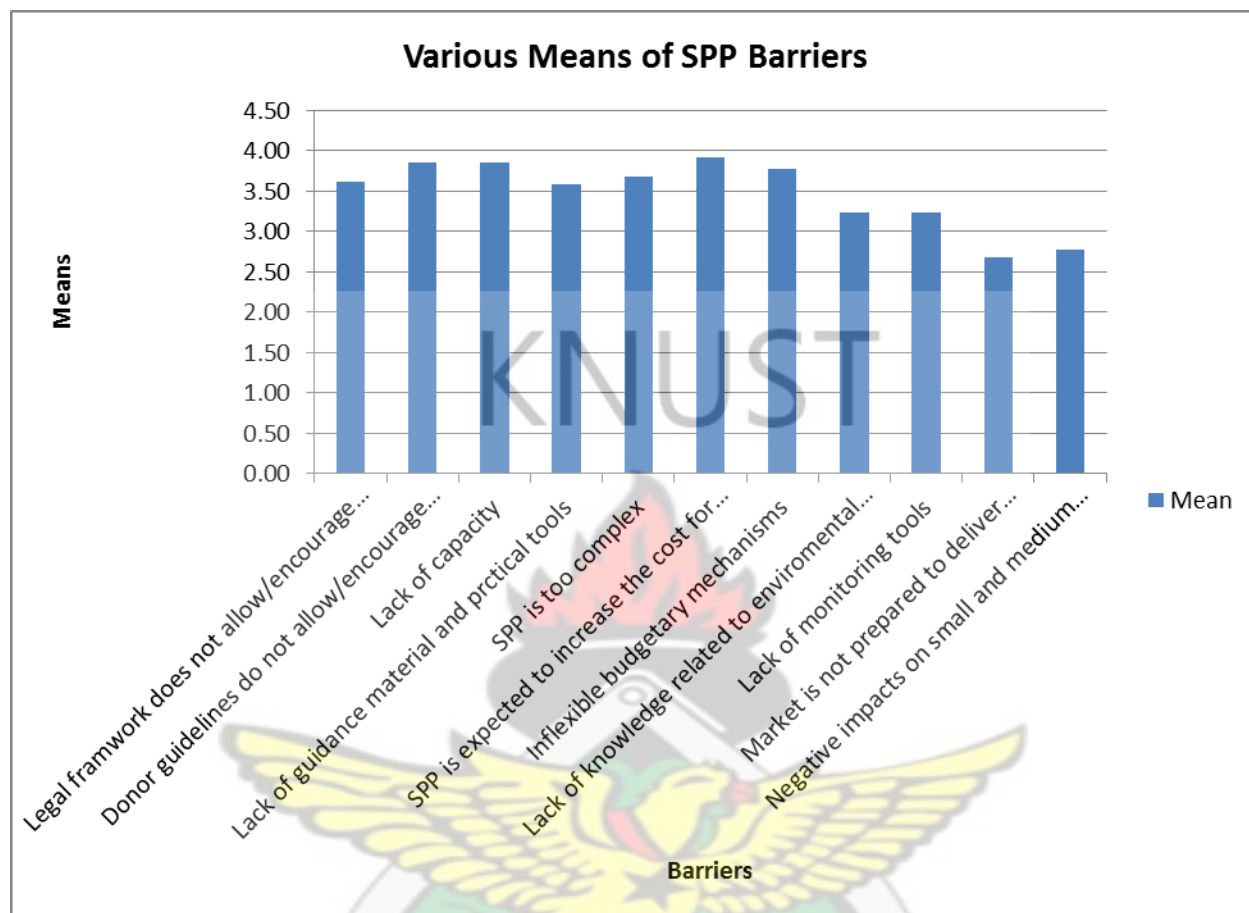
Table 1.17

<u>Barriers of SPP</u>	<u>Mean</u>
Legal framework does not allow/encourage SPP	3.62
Donor guidelines do not allow/encourage SPP	3.85
Lack of capacity	3.85
Lack of guidance material and practical tools	3.58
SPP is too complex	3.69
SPP is expected to increase the cost for public procurement	3.92
Inflexible budgetary mechanisms	3.77
Lack of knowledge related to environmental and social policies	3.23
Lack of monitoring tools	3.23
Market is not prepared to deliver sustainable products and services	2.69
Negative impacts on small and medium size local companies	2.77

Source: Researcher's Field Work, 2014

As revealed by the table 1.17, majority of the respondent stated that legal framework does not allow/encourage SPP (3.65 mean), donor guidelines do not allow/encourage SPP (3.85 mean), lack of capacity (3.85 mean) and SPP is expected to increase the cost for public procurement (3.92 mean). So the relevance potential barriers in implementing SPP from the above table are presented by the highest mean (3.92).

Figure 10 Various means of SPP Barriers



Source: Researcher's Field Work, 2014

- ❖ The relevance potential barriers in implementing SPP from the above figure 10 are:
- ❖ legal framwork does not allow/encourage SPP (3.65 mean),
- ❖ donor guidelines do not allow/encourage SPP (3.85 mean),
- ❖ lack of capacity (3.85 mean) and
- ❖ SPP is expected to increase the cost for public procurement (3.92 mean).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, conclusions that have been arrived at and recommendations. Also, the chapter presents areas for further research which were identified by the researcher during his research work.

5.2 Summary, Conclusions and Recommendations

The purpose of the study was to assess the sustainable procurement practice in Ghana Health Service Headquarters. The research finding showed that sustainable procurement practices were not being practiced in Ghana Health Service Headquarters, Accra.

Lowest evaluated price of a tenderer was still a major selection criterion in awarding contract. Social and environmental considerations were not being incorporated in the purchasing decisions. Ghana Health Service Headquarters did not have in place a policy on sustainable procurement; as a result it was not mandatory to carryout sustainable procurement. Furthermore, there was lack legislative instrument on part of government for public sector to embark on sustainable procurement practice in Ghana. Majority of the employees were not aware of sustainable procurement practice at Ghana Health Service Headquarters.

Researcher's study concluded that lack of sustainable procurement policy document at Ghana Health Service Headquarters and the public procurement act, Act 663 of 2003 does not considered sustainable procurement practices was a major limitation to the practice of sustainable

procurement at Ghana Health Service Headquarters. It was difficult to enforce sustainability practices in the absence of a policy.

The study makes the following recommendations:

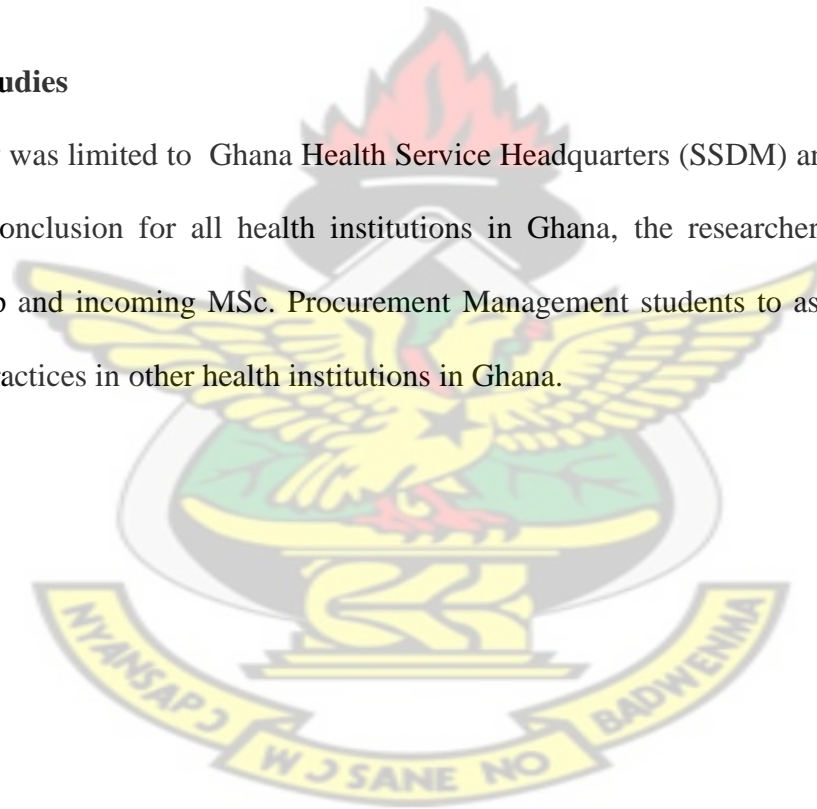
- ❖ A sustainable procurement policy document should be made available at Ghana Health Service Headquarters. This would ensure enforceability of sustainable procurement practices.
- ❖ The government should fast track the amendment of the country's Procurement Act; Act 663 of 2003 to include sustainable requirements such as environmental, social and economic issues of sustainability in public procurement.
- ❖ Employees should be trained on sustainable procurement concept, and regular refresher courses should be put in place so as to enhance the skills and knowledge for effective sustainable procurement practices.
- ❖ Supplier appraisal criteria which incorporate sustainability aspects should be formulated and used as a guiding tool.
- ❖ Also, in evaluation of tenders and award of contracts for health Commodities and services at Ghana Health Service either being simple project, complex project and framework agreement, contract should be awarded based on the economically most advantageous tenderer.
- ❖ Whole life costing concept should be considered in the procurement decisions, where, the cost of the product from design to disposal should be considered, sustainable products may be expensive but can reap later cost savings in running costs for example energy saving appliances.

5.2 Limitations of the Study

1. Inability to retrieve all questionnaires administered from respondents at Ghana Inability Health Service Headquarters.
2. Difficulty to get enough information to complete the project work
3. The study was limited in scope by its budget and time frame. It was not possible for the researcher to cover all health institutions in Greater Accra and outside Greater Accra due to limited resources and time.

5.3 Further Studies

Since the study was limited to Ghana Health Service Headquarters (SSDM) and cannot be used to draw a final conclusion for all health institutions in Ghana, the researcher therefore, throw a challenge to up and incoming MSc. Procurement Management students to assess the sustainable procurement practices in other health institutions in Ghana.



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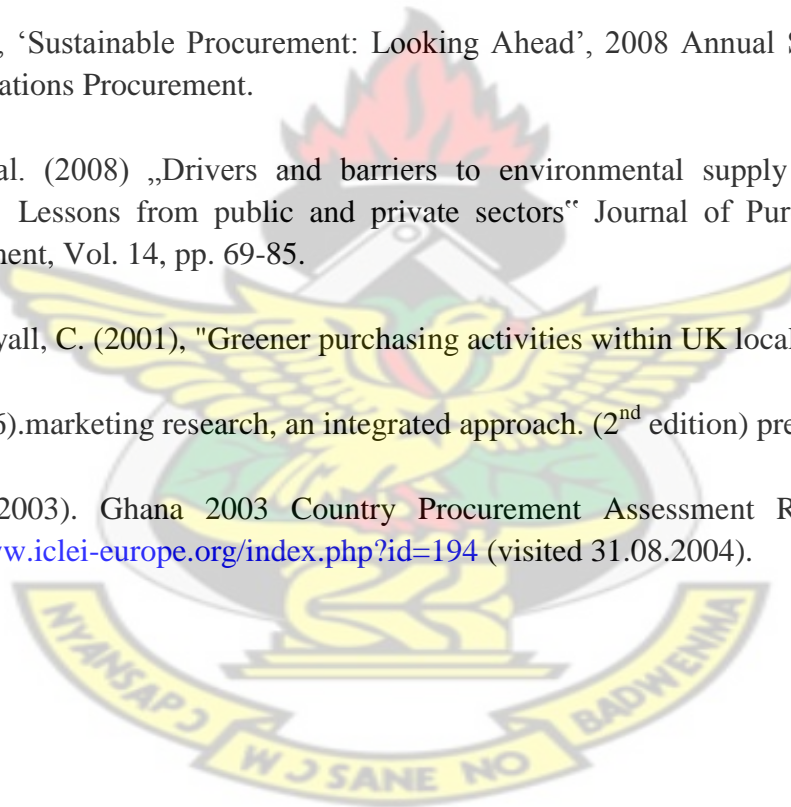
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APPENDICES

APPENDIX A

KWAME NKRUMAH OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF BUILDING TECHNOLOGY.



QUESTIONNAIRE

TOPIC: SUSTAINABLE PROCUREMENT PRACTICE IN GHANA HEALTH SERVICE.

Respondents' Assurance

This study is purely an academic work. It is in partial fulfillment of the requirement for the award of Msc. Procurement Management.

PERSONAL DATA

SEX: MALE

☐

FEMALE:

☐

POSITION:

AGE: 18yrs-29yrs

☐

30yrs-39yrs

☐

40yrs. and Above

☐

For how long have you been working with the organization (Ghana Health Service)?

.....

RELATED ISSUES

1) How often does your department procure new items?

(a) Daily (b) Weekly (c) Quarterly (d) Yearly

(e) Others (please specify)

2) Are you aware of sustainable procurement practice at the Ghana Health Service?

Yes: ☐ No: ☐ Others ☐ specify

If yes, how is SPP most commonly perceived?

- ❖ Green or environmentally friendly procurement? ☐
- ❖ Socially responsible procurement? ☐
- ❖ Economically responsible procurement? ☐
- ❖ Others ☐

Specify

3) Does your department have procurement manual? Yes: ☐ No ☐

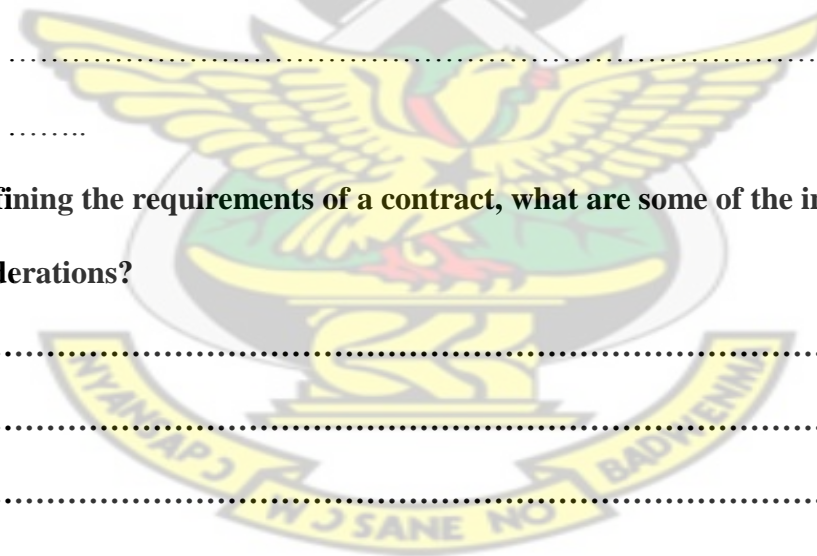
If yes, how does it benefit the organization in the implementation of effective sustainable public Procurement in Ghana Health Service?

.....
.....
.....

4) Please indicate how relevant the potential benefits listed below have been in promoting sustainable public procurement:

4=highly relevant; 3 = relevant; 2 = less relevant; 1 = not relevant at all

- ❖ Financial savings over the lifetime of products/services
- ❖ Stimulating markets to offer more sustainable solutions/innovations
- ❖ Contributing to meeting environmental challenges and binding targets
- ❖ Environmental benefits at local level
- ❖ Improved compliance with social and labor law
- ❖ Improved living conditions and social justice
- ❖ Demonstrate responsible governance, improve public image, lead by example
- ❖ Others: Please specify



5) In defining the requirements of a contract, what are some of the important sustainability considerations?

.....

.....

.....

6) Evaluation of tenders and award of contracts, how are contracts awarded for health

Commodities and services at Ghana Health Service?

Main principle for	Simple	Complex	Framework
Award of contract	project	project	agreement
Lowest price	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The economically most advantageous tenderer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7) Does your department have a policy in place to ensure implementation of sustainable

procurement practices? Yes ☐ No ☐ Others ☐

Specify.....

8) Does your organization dispose of scraps, surplus or obsolete items?

Yes ☐ No ☐ Sometimes ☐

Specify.....

If yes, state, two procedures in respect to the disposal of scrap and obsolete surplus items that involve environmental, social and economic aspect of sustainability?

.....

.....

.....

9) Does your department faced difficulties in the effective sustainable procurement

Practices? Yes ☐ No ☐ Sometimes ☐

Specify.....

If yes, what are the some of the difficulties faced?

.....

.....

.....

10)Please indicate the relevance of the potential barriers listed below in implementing SPP:

4=highly relevant; 3 = relevant; 2 = less relevant; 1 = not relevant at all

- ❖ Legal framework does not allow/encourage SPP
- ❖ Donor Guidelines do not allow/encourage SPP
- ❖ Lack of capacity
- ❖ Lack of guidance material and practical tools
- ❖ SPP is too complex
- ❖ SPP is expected to increase the cost for public procurement
- ❖ Inflexible budgetary mechanisms
- ❖ Lack of knowledge related to environmental and social policies
- ❖ Lack of monitoring tools
- ❖ Market is not prepared to deliver sustainable products and services
- ❖ Negative impacts on small and medium sized local companies
- ❖ Others: Please specify

11) Do you think the success of SPP in the Ghana Health Service depends on the commitment of individuals within the organizations? Or is there a “bigger” influence

(state)?

.....

.....

.....

12) What are the factors that you consider before making a purchase decisions at Ghana Health Service?

.....

.....

.....

.....

13) Is there a general code of conduct for suppliers concerning the practice of sustainable public procurement in Ghana Health Service? If yes, state:.....

.....

.....

14) In implementing Sustainable Public Procurement Process successfully, what are some of factors to be considered under the followings:

a) Selecting suppliers, service providers and contractors?

.....

.....

.....

.....

b) Evaluation of tenders and award of contracts?

.....

.....

.....

.....

c) Contract Implementation?

.....

.....

.....

.....

15) List the various types of documents used in procurement activities in Ghana Health Service?

.....

.....

.....

.....

16) Does your department have supplier's information files?

Yes

☐

No

☐

If yes, how does it help in the implementation of sustainable procurement at your outfit?

.....

.....

.....

.....

17) Is there a system in place to manage the environmental impact during the public procurement process in Ghana Health Service? Yes ☐ No ☐

If yes, state some of the systems that are in place to manage environmental impact?

.....

.....

.....

18) Other opinions?

.....

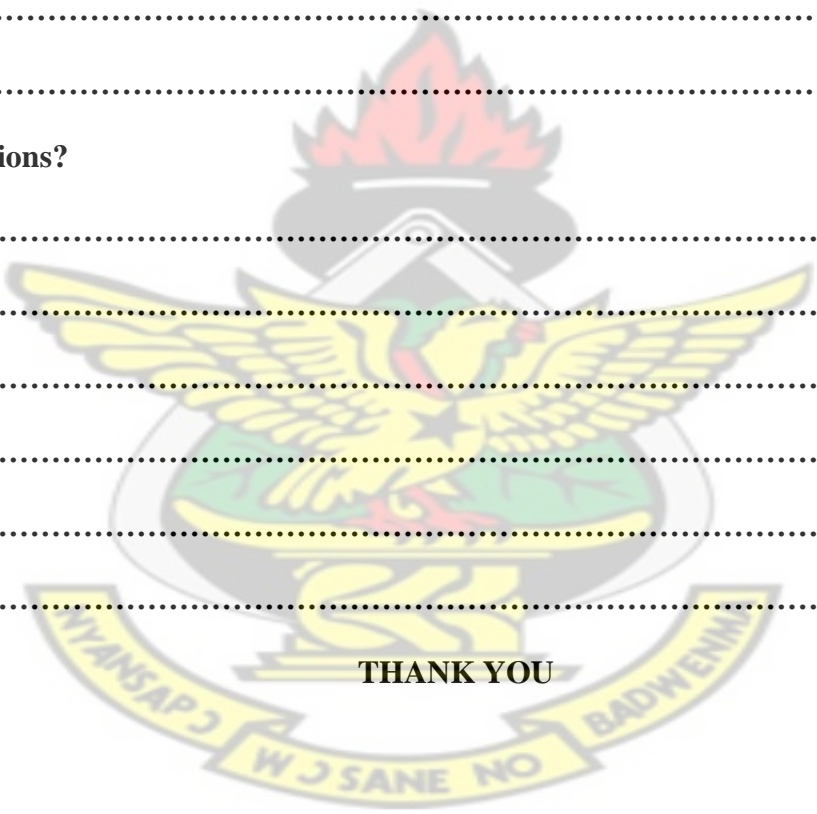
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THANK YOU